Table of all ADE-types of singular fibers of elliptic $K3$ surfaces and the torsion parts of their Mordell-Weil groups

Ichiro Shimada

This is the table of all ADE-types of singular fibers of elliptic $K3$ surfaces and the torsion parts of their Mordell-Weil groups.

In the second column of Table 1, all ADE-types of rank ≤ 18 and euler number ≤ 24 are listed according to the rank and the lexicographic order. For each ADE-type Σ, the third column shows the list of all abelian groups that can be realized as the torsion part of the Mordell-Weil group of an elliptic $K3$ surface $f : X \to \mathbb{P}^1$ with $\Sigma_f = \Sigma$. Here, $[a]$ is the cyclic group $\mathbb{Z}/(a)$ (in particular, $[1]$ is the trivial group), and $[a, b]$ is the group $\mathbb{Z}/(a) \times \mathbb{Z}/(b)$. The third column being "empty" means that the ADE-type does not appear as an ADE-type of singular fibers of any elliptic $K3$ surface.

Table 2 shows, for each abelian group G with order ≥ 3 that appears as G_f of some elliptic $K3$ surface $f : X \to \mathbb{P}^1$, the list of all ADE-types Σ such that the pair (Σ, G) appears in Table 1.

Table 1 (rank 1 - rank 9)

rank 1

1	A_1	[1]

rank 2

2	A_2	[1]
3	$2\,A_1$	[1]

rank 3

4	A_3	[1]
5	$A_2 + A_1$	[1]
6	$3\,A_1$	[1]

rank 4

7	D_4	[1]
8	A_4	[1]
9	$A_3 + A_1$	[1]
10	$2\,A_2$	[1]
11	$A_2 + 2\,A_1$	[1]
12	$4\,A_1$	[1]

rank 5

13	D_5	[1]
14	$D_4 + A_1$	[1]
15	A_5	[1]
16	$A_4 + A_1$	[1]
17	$A_3 + A_2$	[1]
18	$A_3 + 2\,A_1$	[1]
19	$2\,A_2 + A_1$	[1]
20	$A_2 + 3\,A_1$	[1]
21	$5\,A_1$	[1]

rank 6

22	E_6	[1]
23	D_6	[1]
24	$D_5 + A_1$	[1]
25	$D_4 + A_2$	[1]
26	$D_4 + 2\,A_1$	[1]
27	A_6	[1]
28	$A_5 + A_1$	[1]
29	$A_4 + A_2$	[1]
30	$A_4 + 2\,A_1$	[1]
31	$2\,A_3$	[1]
32	$A_3 + A_2 + A_1$	[1]
33	$A_3 + 3\,A_1$	[1]
34	$3\,A_2$	[1]
35	$2\,A_2 + 2\,A_1$	[1]
36	$A_2 + 4\,A_1$	[1]
37	$6\,A_1$	[1]

rank 7

38	E_7	[1]
39	$E_6 + A_1$	[1]
40	D_7	[1]
41	$D_6 + A_1$	[1]
42	$D_5 + A_2$	[1]
43	$D_5 + 2\,A_1$	[1]
44	$D_4 + A_3$	[1]
45	$D_4 + A_2 + A_1$	[1]
46	$D_4 + 3\,A_1$	[1]
47	A_7	[1]
48	$A_6 + A_1$	[1]
49	$A_5 + A_2$	[1]
50	$A_5 + 2\,A_1$	[1]
51	$A_4 + A_3$	[1]
52	$A_4 + A_2 + A_1$	[1]
53	$A_4 + 3\,A_1$	[1]
54	$2\,A_3 + A_1$	[1]
55	$A_3 + 2\,A_2$	[1]
56	$A_3 + A_2 + 2\,A_1$	[1]
57	$A_3 + 4\,A_1$	[1]
58	$3\,A_2 + A_1$	[1]
59	$2\,A_2 + 3\,A_1$	[1]
60	$A_2 + 5\,A_1$	[1]
61	$7\,A_1$	[1]

rank 8

62	E_8	[1]
63	$E_7 + A_1$	[1]
64	$E_6 + A_2$	[1]
65	$E_6 + 2\,A_1$	[1]
66	D_8	[1]
67	$D_7 + A_1$	[1]
68	$D_6 + A_2$	[1]
69	$D_6 + 2\,A_1$	[1]
70	$D_5 + A_3$	[1]
71	$D_5 + A_2 + A_1$	[1]
72	$D_5 + 3\,A_1$	[1]
73	$2\,D_4$	[1]
74	$D_4 + A_4$	[1]
75	$D_4 + A_3 + A_1$	[1]
76	$D_4 + 2\,A_2$	[1]
77	$D_4 + A_2 + 2\,A_1$	[1]
78	$D_4 + 4\,A_1$	[1]
79	A_8	[1]
80	$A_7 + A_1$	[1]
81	$A_6 + A_2$	[1]
82	$A_6 + 2\,A_1$	[1]
83	$A_5 + A_3$	[1]
84	$A_5 + A_2 + A_1$	[1]
85	$A_5 + 3\,A_1$	[1]
86	$2\,A_4$	[1]
87	$A_4 + A_3 + A_1$	[1]
88	$A_4 + 2\,A_2$	[1]
89	$A_4 + A_2 + 2\,A_1$	[1]
90	$A_4 + 4\,A_1$	[1]
91	$2\,A_3 + A_2$	[1]
92	$2\,A_3 + 2\,A_1$	[1]
93	$A_3 + 2\,A_2 + A_1$	[1]
94	$A_3 + A_2 + 3\,A_1$	[1]
95	$A_3 + 5\,A_1$	[1]
96	$4\,A_2$	[1]
97	$3\,A_2 + 2\,A_1$	[1]
98	$2\,A_2 + 4\,A_1$	[1]
99	$A_2 + 6\,A_1$	[1]
100	$8\,A_1$	[1] , [2]

rank 9

101	$E_8 + A_1$	[1]
102	$E_7 + A_2$	[1]

Table 1 (rank 9 - rank 10)

103	$E_7 + 2A_1$	[1]
104	$E_6 + A_3$	[1]
105	$E_6 + A_2 + A_1$	[1]
106	$E_6 + 3A_1$	[1]
107	D_9	[1]
108	$D_8 + A_1$	[1]
109	$D_7 + A_2$	[1]
110	$D_7 + 2A_1$	[1]
111	$D_6 + A_3$	[1]
112	$D_6 + A_2 + A_1$	[1]
113	$D_6 + 3A_1$	[1]
114	$D_5 + D_4$	[1]
115	$D_5 + A_4$	[1]
116	$D_5 + A_3 + A_1$	[1]
117	$D_5 + 2A_2$	[1]
118	$D_5 + A_2 + 2A_1$	[1]
119	$D_5 + 4A_1$	[1]
120	$2D_4 + A_1$	[1]
121	$D_4 + A_5$	[1]
122	$D_4 + A_4 + A_1$	[1]
123	$D_4 + A_3 + A_2$	[1]
124	$D_4 + A_3 + 2A_1$	[1]
125	$D_4 + 2A_2 + A_1$	[1]
126	$D_4 + A_2 + 3A_1$	[1]
127	$D_4 + 5A_1$	[1]
128	A_9	[1]
129	$A_8 + A_1$	[1]
130	$A_7 + A_2$	[1]
131	$A_7 + 2A_1$	[1]
132	$A_6 + A_3$	[1]
133	$A_6 + A_2 + A_1$	[1]
134	$A_6 + 3A_1$	[1]
135	$A_5 + A_4$	[1]
136	$A_5 + A_3 + A_1$	[1]
137	$A_5 + 2A_2$	[1]
138	$A_5 + A_2 + 2A_1$	[1]
139	$A_5 + 4A_1$	[1]
140	$2A_4 + A_1$	[1]
141	$A_4 + A_3 + A_2$	[1]
142	$A_4 + A_3 + 2A_1$	[1]
143	$A_4 + 2A_2 + A_1$	[1]
144	$A_4 + A_2 + 3A_1$	[1]
145	$A_4 + 5A_1$	[1]
146	$3A_3$	[1]
147	$2A_3 + A_2 + A_1$	[1]
148	$2A_3 + 3A_1$	[1]
149	$A_3 + 3A_2$	[1]
150	$A_3 + 2A_2 + 2A_1$	[1]
151	$A_3 + A_2 + 4A_1$	[1]
152	$A_3 + 6A_1$	[1] , [2]
153	$4A_2 + A_1$	[1]
154	$3A_2 + 3A_1$	[1]
155	$2A_2 + 5A_1$	[1]
156	$A_2 + 7A_1$	[1]
157	$9A_1$	[1] , [2]

rank 10

158	$E_8 + A_2$	[1]
159	$E_8 + 2A_1$	[1]
160	$E_7 + A_3$	[1]
161	$E_7 + A_2 + A_1$	[1]
162	$E_7 + 3A_1$	[1]
163	$E_6 + D_4$	[1]
164	$E_6 + A_4$	[1]
165	$E_6 + A_3 + A_1$	[1]
166	$E_6 + 2A_2$	[1]
167	$E_6 + A_2 + 2A_1$	[1]
168	$E_6 + 4A_1$	[1]
169	D_{10}	[1]
170	$D_9 + A_1$	[1]
171	$D_8 + A_2$	[1]
172	$D_8 + 2A_1$	[1]
173	$D_7 + A_3$	[1]
174	$D_7 + A_2 + A_1$	[1]
175	$D_7 + 3A_1$	[1]
176	$D_6 + D_4$	[1]
177	$D_6 + A_4$	[1]
178	$D_6 + A_3 + A_1$	[1]
179	$D_6 + 2A_2$	[1]
180	$D_6 + A_2 + 2A_1$	[1]
181	$D_6 + 4A_1$	[1]
182	$2D_5$	[1]
183	$D_5 + D_4 + A_1$	[1]
184	$D_5 + A_5$	[1]
185	$D_5 + A_4 + A_1$	[1]
186	$D_5 + A_3 + A_2$	[1]
187	$D_5 + A_3 + 2A_1$	[1]
188	$D_5 + 2A_2 + A_1$	[1]
189	$D_5 + A_2 + 3A_1$	[1]
190	$D_5 + 5A_1$	[1]
191	$2D_4 + A_2$	[1]
192	$2D_4 + 2A_1$	[1]
193	$D_4 + A_6$	[1]
194	$D_4 + A_5 + A_1$	[1]
195	$D_4 + A_4 + A_2$	[1]
196	$D_4 + A_4 + 2A_1$	[1]
197	$D_4 + 2A_3$	[1]
198	$D_4 + A_3 + A_2 + A_1$	[1]
199	$D_4 + A_3 + 3A_1$	[1]
200	$D_4 + 3A_2$	[1]
201	$D_4 + 2A_2 + 2A_1$	[1]
202	$D_4 + A_2 + 4A_1$	[1]
203	$D_4 + 6A_1$	[1] , [2]
204	A_{10}	[1]
205	$A_9 + A_1$	[1]
206	$A_8 + A_2$	[1]
207	$A_8 + 2A_1$	[1]
208	$A_7 + A_3$	[1]
209	$A_7 + A_2 + A_1$	[1]
210	$A_7 + 3A_1$	[1]
211	$A_6 + A_4$	[1]
212	$A_6 + A_3 + A_1$	[1]
213	$A_6 + 2A_2$	[1]
214	$A_6 + A_2 + 2A_1$	[1]
215	$A_6 + 4A_1$	[1]
216	$2A_5$	[1]
217	$A_5 + A_4 + A_1$	[1]
218	$A_5 + A_3 + A_2$	[1]
219	$A_5 + A_3 + 2A_1$	[1]
220	$A_5 + 2A_2 + A_1$	[1]

Table 1 (rank 10 - rank 11)

221	$A_5 + A_2 + 3A_1$	[1]
222	$A_5 + 5A_1$	[1] , [2]
223	$2A_4 + A_2$	[1]
224	$2A_4 + 2A_1$	[1]
225	$A_4 + 2A_3$	[1]
226	$A_4 + A_3 + A_2 + A_1$	[1]
227	$A_4 + A_3 + 3A_1$	[1]
228	$A_4 + 3A_2$	[1]
229	$A_4 + 2A_2 + 2A_1$	[1]
230	$A_4 + A_2 + 4A_1$	[1]
231	$A_4 + 6A_1$	[1]
232	$3A_3 + A_1$	[1]
233	$2A_3 + 2A_2$	[1]
234	$2A_3 + A_2 + 2A_1$	[1]
235	$2A_3 + 4A_1$	[1] , [2]
236	$A_3 + 3A_2 + A_1$	[1]
237	$A_3 + 2A_2 + 3A_1$	[1]
238	$A_3 + A_2 + 5A_1$	[1]
239	$A_3 + 7A_1$	[1] , [2]
240	$5A_2$	[1]
241	$4A_2 + 2A_1$	[1]
242	$3A_2 + 4A_1$	[1]
243	$2A_2 + 6A_1$	[1]
244	$A_2 + 8A_1$	[1] , [2]
245	$10A_1$	[1] , [2]

rank 11

246	$E_8 + A_3$	[1]
247	$E_8 + A_2 + A_1$	[1]
248	$E_8 + 3A_1$	[1]
249	$E_7 + D_4$	[1]
250	$E_7 + A_4$	[1]
251	$E_7 + A_3 + A_1$	[1]
252	$E_7 + 2A_2$	[1]
253	$E_7 + A_2 + 2A_1$	[1]
254	$E_7 + 4A_1$	[1]
255	$E_6 + D_5$	[1]
256	$E_6 + D_4 + A_1$	[1]
257	$E_6 + A_5$	[1]
258	$E_6 + A_4 + A_1$	[1]
259	$E_6 + A_3 + A_2$	[1]
260	$E_6 + A_3 + 2A_1$	[1]
261	$E_6 + 2A_2 + A_1$	[1]
262	$E_6 + A_2 + 3A_1$	[1]
263	$E_6 + 5A_1$	[1]
264	D_{11}	[1]
265	$D_{10} + A_1$	[1]
266	$D_9 + A_2$	[1]
267	$D_9 + 2A_1$	[1]
268	$D_8 + A_3$	[1]
269	$D_8 + A_2 + A_1$	[1]
270	$D_8 + 3A_1$	[1]
271	$D_7 + D_4$	[1]
272	$D_7 + A_4$	[1]
273	$D_7 + A_3 + A_1$	[1]
274	$D_7 + 2A_2$	[1]
275	$D_7 + A_2 + 2A_1$	[1]
276	$D_7 + 4A_1$	[1]
277	$D_6 + D_5$	[1]
278	$D_6 + D_4 + A_1$	[1]
279	$D_6 + A_5$	[1]
280	$D_6 + A_4 + A_1$	[1]
281	$D_6 + A_3 + A_2$	[1]
282	$D_6 + A_3 + 2A_1$	[1]
283	$D_6 + 2A_2 + A_1$	[1]
284	$D_6 + A_2 + 3A_1$	[1]
285	$D_6 + 5A_1$	[1] , [2]
286	$2D_5 + A_1$	[1]
287	$D_5 + D_4 + A_2$	[1]
288	$D_5 + D_4 + 2A_1$	[1]
289	$D_5 + A_6$	[1]
290	$D_5 + A_5 + A_1$	[1]
291	$D_5 + A_4 + A_2$	[1]
292	$D_5 + A_4 + 2A_1$	[1]
293	$D_5 + 2A_3$	[1]
294	$D_5 + A_3 + A_2 + A_1$	[1]
295	$D_5 + A_3 + 3A_1$	[1]
296	$D_5 + 3A_2$	[1]
297	$D_5 + 2A_2 + 2A_1$	[1]
298	$D_5 + A_2 + 4A_1$	[1]
299	$D_5 + 6A_1$	[1] , [2]
300	$2D_4 + A_3$	[1]
301	$2D_4 + A_2 + A_1$	[1]
302	$2D_4 + 3A_1$	[1]
303	$D_4 + A_7$	[1]
304	$D_4 + A_6 + A_1$	[1]
305	$D_4 + A_5 + A_2$	[1]
306	$D_4 + A_5 + 2A_1$	[1]
307	$D_4 + A_4 + A_3$	[1]
308	$D_4 + A_4 + A_2 + A_1$	[1]
309	$D_4 + A_4 + 3A_1$	[1]
310	$D_4 + 2A_3 + A_1$	[1]
311	$D_4 + A_3 + 2A_2$	[1]
312	$D_4 + A_3 + A_2 + 2A_1$	[1]
313	$D_4 + A_3 + 4A_1$	[1] , [2]
314	$D_4 + 3A_2 + A_1$	[1]
315	$D_4 + 2A_2 + 3A_1$	[1]
316	$D_4 + A_2 + 5A_1$	[1]
317	$D_4 + 7A_1$	[1] , [2]
318	A_{11}	[1]
319	$A_{10} + A_1$	[1]
320	$A_9 + A_2$	[1]
321	$A_9 + 2A_1$	[1]
322	$A_8 + A_3$	[1]
323	$A_8 + A_2 + A_1$	[1]
324	$A_8 + 3A_1$	[1]
325	$A_7 + A_4$	[1]
326	$A_7 + A_3 + A_1$	[1]
327	$A_7 + 2A_2$	[1]
328	$A_7 + A_2 + 2A_1$	[1]
329	$A_7 + 4A_1$	[1] , [2]
330	$A_6 + A_5$	[1]
331	$A_6 + A_4 + A_1$	[1]
332	$A_6 + A_3 + A_2$	[1]
333	$A_6 + A_3 + 2A_1$	[1]
334	$A_6 + 2A_2 + A_1$	[1]
335	$A_6 + A_2 + 3A_1$	[1]
336	$A_6 + 5A_1$	[1]
337	$2A_5 + A_1$	[1]
338	$A_5 + A_4 + A_2$	[1]

Table 1 (rank 11 - rank 12)

339	$A_5 + A_4 + 2A_1$	[1]
340	$A_5 + 2A_3$	[1]
341	$A_5 + A_3 + A_2 + A_1$	[1]
342	$A_5 + A_3 + 3A_1$	[1] , [2]
343	$A_5 + 3A_2$	[1]
344	$A_5 + 2A_2 + 2A_1$	[1]
345	$A_5 + A_2 + 4A_1$	[1]
346	$A_5 + 6A_1$	[1] , [2]
347	$2A_4 + A_3$	[1]
348	$2A_4 + A_2 + A_1$	[1]
349	$2A_4 + 3A_1$	[1]
350	$A_4 + 2A_3 + A_1$	[1]
351	$A_4 + A_3 + 2A_2$	[1]
352	$A_4 + A_3 + A_2 + 2A_1$	[1]
353	$A_4 + A_3 + 4A_1$	[1]
354	$A_4 + 3A_2 + A_1$	[1]
355	$A_4 + 2A_2 + 3A_1$	[1]
356	$A_4 + A_2 + 5A_1$	[1]
357	$A_4 + 7A_1$	[1]
358	$3A_3 + A_2$	[1]
359	$3A_3 + 2A_1$	[1] , [2]
360	$2A_3 + 2A_2 + A_1$	[1]
361	$2A_3 + A_2 + 3A_1$	[1]
362	$2A_3 + 5A_1$	[1] , [2]
363	$A_3 + 4A_2$	[1]
364	$A_3 + 3A_2 + 2A_1$	[1]
365	$A_3 + 2A_2 + 4A_1$	[1]
366	$A_3 + A_2 + 6A_1$	[1] , [2]
367	$A_3 + 8A_1$	[1] , [2]
368	$5A_2 + A_1$	[1]
369	$4A_2 + 3A_1$	[1]
370	$3A_2 + 5A_1$	[1]
371	$2A_2 + 7A_1$	[1]
372	$A_2 + 9A_1$	[1] , [2]
373	$11A_1$	[2]

rank 12

374	$E_8 + D_4$	[1]
375	$E_8 + A_4$	[1]
376	$E_8 + A_3 + A_1$	[1]
377	$E_8 + 2A_2$	[1]
378	$E_8 + A_2 + 2A_1$	[1]
379	$E_8 + 4A_1$	[1]
380	$E_7 + D_5$	[1]
381	$E_7 + D_4 + A_1$	[1]
382	$E_7 + A_5$	[1]
383	$E_7 + A_4 + A_1$	[1]
384	$E_7 + A_3 + A_2$	[1]
385	$E_7 + A_3 + 2A_1$	[1]
386	$E_7 + 2A_2 + A_1$	[1]
387	$E_7 + A_2 + 3A_1$	[1]
388	$E_7 + 5A_1$	[1] , [2]
389	$2E_6$	[1]
390	$E_6 + D_6$	[1]
391	$E_6 + D_5 + A_1$	[1]
392	$E_6 + D_4 + A_2$	[1]
393	$E_6 + D_4 + 2A_1$	[1]
394	$E_6 + A_6$	[1]
395	$E_6 + A_5 + A_1$	[1]
396	$E_6 + A_4 + A_2$	[1]
397	$E_6 + A_4 + 2A_1$	[1]
398	$E_6 + 2A_3$	[1]
399	$E_6 + A_3 + A_2 + A_1$	[1]
400	$E_6 + A_3 + 3A_1$	[1]
401	$E_6 + 3A_2$	[1]
402	$E_6 + 2A_2 + 2A_1$	[1]
403	$E_6 + A_2 + 4A_1$	[1]
404	$E_6 + 6A_1$	[1]
405	D_{12}	[1]
406	$D_{11} + A_1$	[1]
407	$D_{10} + A_2$	[1]
408	$D_{10} + 2A_1$	[1]
409	$D_9 + A_3$	[1]
410	$D_9 + A_2 + A_1$	[1]
411	$D_9 + 3A_1$	[1]
412	$D_8 + D_4$	[1]
413	$D_8 + A_4$	[1]
414	$D_8 + A_3 + A_1$	[1]
415	$D_8 + 2A_2$	[1]
416	$D_8 + A_2 + 2A_1$	[1]
417	$D_8 + 4A_1$	[1] , [2]
418	$D_7 + D_5$	[1]
419	$D_7 + D_4 + A_1$	[1]
420	$D_7 + A_5$	[1]
421	$D_7 + A_4 + A_1$	[1]
422	$D_7 + A_3 + A_2$	[1]
423	$D_7 + A_3 + 2A_1$	[1]
424	$D_7 + 2A_2 + A_1$	[1]
425	$D_7 + A_2 + 3A_1$	[1]
426	$D_7 + 5A_1$	[1]
427	$2D_6$	[1]
428	$D_6 + D_5 + A_1$	[1]
429	$D_6 + D_4 + A_2$	[1]
430	$D_6 + D_4 + 2A_1$	[1]
431	$D_6 + A_6$	[1]
432	$D_6 + A_5 + A_1$	[1]
433	$D_6 + A_4 + A_2$	[1]
434	$D_6 + A_4 + 2A_1$	[1]
435	$D_6 + 2A_3$	[1]
436	$D_6 + A_3 + A_2 + A_1$	[1]
437	$D_6 + A_3 + 3A_1$	[1] , [2]
438	$D_6 + 3A_2$	[1]
439	$D_6 + 2A_2 + 2A_1$	[1]
440	$D_6 + A_2 + 4A_1$	[1]
441	$D_6 + 6A_1$	[1] , [2]
442	$2D_5 + A_2$	[1]
443	$2D_5 + 2A_1$	[1]
444	$D_5 + D_4 + A_3$	[1]
445	$D_5 + D_4 + A_2 + A_1$	[1]
446	$D_5 + D_4 + 3A_1$	[1]
447	$D_5 + A_7$	[1]
448	$D_5 + A_6 + A_1$	[1]
449	$D_5 + A_5 + A_2$	[1]
450	$D_5 + A_5 + 2A_1$	[1]
451	$D_5 + A_4 + A_3$	[1]
452	$D_5 + A_4 + A_2 + A_1$	[1]
453	$D_5 + A_4 + 3A_1$	[1]
454	$D_5 + 2A_3 + A_1$	[1]
455	$D_5 + A_3 + 2A_2$	[1]
456	$D_5 + A_3 + A_2 + 2A_1$	[1]

Table 1 (rank 12 - rank 13)

457	$D_5 + A_3 + 4A_1$	[1] , [2]
458	$D_5 + 3A_2 + A_1$	[1]
459	$D_5 + 2A_2 + 3A_1$	[1]
460	$D_5 + A_2 + 5A_1$	[1]
461	$D_5 + 7A_1$	[1] , [2]
462	$3D_4$	[1]
463	$2D_4 + A_4$	[1]
464	$2D_4 + A_3 + A_1$	[1]
465	$2D_4 + 2A_2$	[1]
466	$2D_4 + A_2 + 2A_1$	[1]
467	$2D_4 + 4A_1$	[1] , [2]
468	$D_4 + A_8$	[1]
469	$D_4 + A_7 + A_1$	[1]
470	$D_4 + A_6 + A_2$	[1]
471	$D_4 + A_6 + 2A_1$	[1]
472	$D_4 + A_5 + A_3$	[1]
473	$D_4 + A_5 + A_2 + A_1$	[1]
474	$D_4 + A_5 + 3A_1$	[1] , [2]
475	$D_4 + 2A_4$	[1]
476	$D_4 + A_4 + A_3 + A_1$	[1]
477	$D_4 + A_4 + 2A_2$	[1]
478	$D_4 + A_4 + A_2 + 2A_1$	[1]
479	$D_4 + A_4 + 4A_1$	[1]
480	$D_4 + 2A_3 + A_2$	[1]
481	$D_4 + 2A_3 + 2A_1$	[1] , [2]
482	$D_4 + A_3 + 2A_2 + A_1$	[1]
483	$D_4 + A_3 + A_2 + 3A_1$	[1]
484	$D_4 + A_3 + 5A_1$	[1] , [2]
485	$D_4 + 4A_2$	[1]
486	$D_4 + 3A_2 + 2A_1$	[1]
487	$D_4 + 2A_2 + 4A_1$	[1]
488	$D_4 + A_2 + 6A_1$	[1] , [2]
489	$D_4 + 8A_1$	[2]
490	A_{12}	[1]
491	$A_{11} + A_1$	[1]
492	$A_{10} + A_2$	[1]
493	$A_{10} + 2A_1$	[1]
494	$A_9 + A_3$	[1]
495	$A_9 + A_2 + A_1$	[1]
496	$A_9 + 3A_1$	[1] , [2]
497	$A_8 + A_4$	[1]
498	$A_8 + A_3 + A_1$	[1]
499	$A_8 + 2A_2$	[1]
500	$A_8 + A_2 + 2A_1$	[1]
501	$A_8 + 4A_1$	[1]
502	$A_7 + A_5$	[1]
503	$A_7 + A_4 + A_1$	[1]
504	$A_7 + A_3 + A_2$	[1]
505	$A_7 + A_3 + 2A_1$	[1] , [2]
506	$A_7 + 2A_2 + A_1$	[1]
507	$A_7 + A_2 + 3A_1$	[1]
508	$A_7 + 5A_1$	[1] , [2]
509	$2A_6$	[1]
510	$A_6 + A_5 + A_1$	[1]
511	$A_6 + A_4 + A_2$	[1]
512	$A_6 + A_4 + 2A_1$	[1]
513	$A_6 + 2A_3$	[1]
514	$A_6 + A_3 + A_2 + A_1$	[1]
515	$A_6 + A_3 + 3A_1$	[1]
516	$A_6 + 3A_2$	[1]
517	$A_6 + 2A_2 + 2A_1$	[1]
518	$A_6 + A_2 + 4A_1$	[1]
519	$A_6 + 6A_1$	[1]
520	$2A_5 + A_2$	[1]
521	$2A_5 + 2A_1$	[1] , [2]
522	$A_5 + A_4 + A_3$	[1]
523	$A_5 + A_4 + A_2 + A_1$	[1]
524	$A_5 + A_4 + 3A_1$	[1]
525	$A_5 + 2A_3 + A_1$	[1] , [2]
526	$A_5 + A_3 + 2A_2$	[1]
527	$A_5 + A_3 + A_2 + 2A_1$	[1]
528	$A_5 + A_3 + 4A_1$	[1] , [2]
529	$A_5 + 3A_2 + A_1$	[1]
530	$A_5 + 2A_2 + 3A_1$	[1]
531	$A_5 + A_2 + 5A_1$	[1] , [2]
532	$A_5 + 7A_1$	[1] , [2]
533	$3A_4$	[1]
534	$2A_4 + A_3 + A_1$	[1]
535	$2A_4 + 2A_2$	[1]
536	$2A_4 + A_2 + 2A_1$	[1]
537	$2A_4 + 4A_1$	[1]
538	$A_4 + 2A_3 + A_2$	[1]
539	$A_4 + 2A_3 + 2A_1$	[1]
540	$A_4 + A_3 + 2A_2 + A_1$	[1]
541	$A_4 + A_3 + A_2 + 3A_1$	[1]
542	$A_4 + A_3 + 5A_1$	[1]
543	$A_4 + 4A_2$	[1]
544	$A_4 + 3A_2 + 2A_1$	[1]
545	$A_4 + 2A_2 + 4A_1$	[1]
546	$A_4 + A_2 + 6A_1$	[1]
547	$A_4 + 8A_1$	[1] , [2]
548	$4A_3$	[1] , [2]
549	$3A_3 + A_2 + A_1$	[1]
550	$3A_3 + 3A_1$	[1] , [2]
551	$2A_3 + 3A_2$	[1]
552	$2A_3 + 2A_2 + 2A_1$	[1]
553	$2A_3 + A_2 + 4A_1$	[1] , [2]
554	$2A_3 + 6A_1$	[1] , [2]
555	$A_3 + 4A_2 + A_1$	[1]
556	$A_3 + 3A_2 + 3A_1$	[1]
557	$A_3 + 2A_2 + 5A_1$	[1]
558	$A_3 + A_2 + 7A_1$	[1] , [2]
559	$A_3 + 9A_1$	[2]
560	$6A_2$	[1] , [3]
561	$5A_2 + 2A_1$	[1]
562	$4A_2 + 4A_1$	[1]
563	$3A_2 + 6A_1$	[1]
564	$2A_2 + 8A_1$	[1] , [2]
565	$A_2 + 10A_1$	[2]
566	$12A_1$	[2, 2]

rank 13

567	$E_8 + D_5$	[1]
568	$E_8 + D_4 + A_1$	[1]
569	$E_8 + A_5$	[1]
570	$E_8 + A_4 + A_1$	[1]
571	$E_8 + A_3 + A_2$	[1]
572	$E_8 + A_3 + 2A_1$	[1]
573	$E_8 + 2A_2 + A_1$	[1]
574	$E_8 + A_2 + 3A_1$	[1]

Table 1 (rank 13)

575	$E_8 + 5A_1$	[1]
576	$E_7 + E_6$	[1]
577	$E_7 + D_6$	[1]
578	$E_7 + D_5 + A_1$	[1]
579	$E_7 + D_4 + A_2$	[1]
580	$E_7 + D_4 + 2A_1$	[1]
581	$E_7 + A_6$	[1]
582	$E_7 + A_5 + A_1$	[1]
583	$E_7 + A_4 + A_2$	[1]
584	$E_7 + A_4 + 2A_1$	[1]
585	$E_7 + 2A_3$	[1]
586	$E_7 + A_3 + A_2 + A_1$	[1]
587	$E_7 + A_3 + 3A_1$	[1] , [2]
588	$E_7 + 3A_2$	[1]
589	$E_7 + 2A_2 + 2A_1$	[1]
590	$E_7 + A_2 + 4A_1$	[1]
591	$E_7 + 6A_1$	[1] , [2]
592	$2E_6 + A_1$	[1]
593	$E_6 + D_7$	[1]
594	$E_6 + D_6 + A_1$	[1]
595	$E_6 + D_5 + A_2$	[1]
596	$E_6 + D_5 + 2A_1$	[1]
597	$E_6 + D_4 + A_3$	[1]
598	$E_6 + D_4 + A_2 + A_1$	[1]
599	$E_6 + D_4 + 3A_1$	[1]
600	$E_6 + A_7$	[1]
601	$E_6 + A_6 + A_1$	[1]
602	$E_6 + A_5 + A_2$	[1]
603	$E_6 + A_5 + 2A_1$	[1]
604	$E_6 + A_4 + A_3$	[1]
605	$E_6 + A_4 + A_2 + A_1$	[1]
606	$E_6 + A_4 + 3A_1$	[1]
607	$E_6 + 2A_3 + A_1$	[1]
608	$E_6 + A_3 + 2A_2$	[1]
609	$E_6 + A_3 + A_2 + 2A_1$	[1]
610	$E_6 + A_3 + 4A_1$	[1]
611	$E_6 + 3A_2 + A_1$	[1]
612	$E_6 + 2A_2 + 3A_1$	[1]
613	$E_6 + A_2 + 5A_1$	[1]
614	$E_6 + 7A_1$	[1]
615	D_{13}	[1]
616	$D_{12} + A_1$	[1]
617	$D_{11} + A_2$	[1]
618	$D_{11} + 2A_1$	[1]
619	$D_{10} + A_3$	[1]
620	$D_{10} + A_2 + A_1$	[1]
621	$D_{10} + 3A_1$	[1] , [2]
622	$D_9 + D_4$	[1]
623	$D_9 + A_4$	[1]
624	$D_9 + A_3 + A_1$	[1]
625	$D_9 + 2A_2$	[1]
626	$D_9 + A_2 + 2A_1$	[1]
627	$D_9 + 4A_1$	[1]
628	$D_8 + D_5$	[1]
629	$D_8 + D_4 + A_1$	[1]
630	$D_8 + A_5$	[1]
631	$D_8 + A_4 + A_1$	[1]
632	$D_8 + A_3 + A_2$	[1]
633	$D_8 + A_3 + 2A_1$	[1] , [2]
634	$D_8 + 2A_2 + A_1$	[1]

635	$D_8 + A_2 + 3A_1$	[1]
636	$D_8 + 5A_1$	[1] , [2]
637	$D_7 + D_6$	[1]
638	$D_7 + D_5 + A_1$	[1]
639	$D_7 + D_4 + A_2$	[1]
640	$D_7 + D_4 + 2A_1$	[1]
641	$D_7 + A_6$	[1]
642	$D_7 + A_5 + A_1$	[1]
643	$D_7 + A_4 + A_2$	[1]
644	$D_7 + A_4 + 2A_1$	[1]
645	$D_7 + 2A_3$	[1]
646	$D_7 + A_3 + A_2 + A_1$	[1]
647	$D_7 + A_3 + 3A_1$	[1]
648	$D_7 + 3A_2$	[1]
649	$D_7 + 2A_2 + 2A_1$	[1]
650	$D_7 + A_2 + 4A_1$	[1]
651	$D_7 + 6A_1$	[1] , [2]
652	$2D_6 + A_1$	[1]
653	$D_6 + D_5 + A_2$	[1]
654	$D_6 + D_5 + 2A_1$	[1]
655	$D_6 + D_4 + A_3$	[1]
656	$D_6 + D_4 + A_2 + A_1$	[1]
657	$D_6 + D_4 + 3A_1$	[1] , [2]
658	$D_6 + A_7$	[1]
659	$D_6 + A_6 + A_1$	[1]
660	$D_6 + A_5 + A_2$	[1]
661	$D_6 + A_5 + 2A_1$	[1] , [2]
662	$D_6 + A_4 + A_3$	[1]
663	$D_6 + A_4 + A_2 + A_1$	[1]
664	$D_6 + A_4 + 3A_1$	[1]
665	$D_6 + 2A_3 + A_1$	[1] , [2]
666	$D_6 + A_3 + 2A_2$	[1]
667	$D_6 + A_3 + A_2 + 2A_1$	[1]
668	$D_6 + A_3 + 4A_1$	[1] , [2]
669	$D_6 + 3A_2 + A_1$	[1]
670	$D_6 + 2A_2 + 3A_1$	[1]
671	$D_6 + A_2 + 5A_1$	[1] , [2]
672	$D_6 + 7A_1$	[2]
673	$2D_5 + A_3$	[1]
674	$2D_5 + A_2 + A_1$	[1]
675	$2D_5 + 3A_1$	[1]
676	$D_5 + 2D_4$	[1]
677	$D_5 + D_4 + A_4$	[1]
678	$D_5 + D_4 + A_3 + A_1$	[1]
679	$D_5 + D_4 + 2A_2$	[1]
680	$D_5 + D_4 + A_2 + 2A_1$	[1]
681	$D_5 + D_4 + 4A_1$	[1] , [2]
682	$D_5 + A_8$	[1]
683	$D_5 + A_7 + A_1$	[1]
684	$D_5 + A_6 + A_2$	[1]
685	$D_5 + A_6 + 2A_1$	[1]
686	$D_5 + A_5 + A_3$	[1]
687	$D_5 + A_5 + A_2 + A_1$	[1]
688	$D_5 + A_5 + 3A_1$	[1] , [2]
689	$D_5 + 2A_4$	[1]
690	$D_5 + A_4 + A_3 + A_1$	[1]
691	$D_5 + A_4 + 2A_2$	[1]
692	$D_5 + A_4 + A_2 + 2A_1$	[1]
693	$D_5 + A_4 + 4A_1$	[1]
694	$D_5 + 2A_3 + A_2$	[1]

Table 1 (rank 13)

695	$D_5 + 2A_3 + 2A_1$	[1] , [2]
696	$D_5 + A_3 + 2A_2 + A_1$	[1]
697	$D_5 + A_3 + A_2 + 3A_1$	[1]
698	$D_5 + A_3 + 5A_1$	[1] , [2]
699	$D_5 + 4A_2$	[1]
700	$D_5 + 3A_2 + 2A_1$	[1]
701	$D_5 + 2A_2 + 4A_1$	[1]
702	$D_5 + A_2 + 6A_1$	[1] , [2]
703	$D_5 + 8A_1$	[2]
704	$3D_4 + A_1$	[1]
705	$2D_4 + A_5$	[1]
706	$2D_4 + A_4 + A_1$	[1]
707	$2D_4 + A_3 + A_2$	[1]
708	$2D_4 + A_3 + 2A_1$	[1] , [2]
709	$2D_4 + 2A_2 + A_1$	[1]
710	$2D_4 + A_2 + 3A_1$	[1]
711	$2D_4 + 5A_1$	[2]
712	$D_4 + A_9$	[1]
713	$D_4 + A_8 + A_1$	[1]
714	$D_4 + A_7 + A_2$	[1]
715	$D_4 + A_7 + 2A_1$	[1] , [2]
716	$D_4 + A_6 + A_3$	[1]
717	$D_4 + A_6 + A_2 + A_1$	[1]
718	$D_4 + A_6 + 3A_1$	[1]
719	$D_4 + A_5 + A_4$	[1]
720	$D_4 + A_5 + A_3 + A_1$	[1] , [2]
721	$D_4 + A_5 + 2A_2$	[1]
722	$D_4 + A_5 + A_2 + 2A_1$	[1]
723	$D_4 + A_5 + 4A_1$	[1] , [2]
724	$D_4 + 2A_4 + A_1$	[1]
725	$D_4 + A_4 + A_3 + A_2$	[1]
726	$D_4 + A_4 + A_3 + 2A_1$	[1]
727	$D_4 + A_4 + 2A_2 + A_1$	[1]
728	$D_4 + A_4 + A_2 + 3A_1$	[1]
729	$D_4 + A_4 + 5A_1$	[1]
730	$D_4 + 3A_3$	[1] , [2]
731	$D_4 + 2A_3 + A_2 + A_1$	[1]
732	$D_4 + 2A_3 + 3A_1$	[1] , [2]
733	$D_4 + A_3 + 3A_2$	[1]
734	$D_4 + A_3 + 2A_2 + 2A_1$	[1]
735	$D_4 + A_3 + A_2 + 4A_1$	[1] , [2]
736	$D_4 + A_3 + 6A_1$	[2]
737	$D_4 + 4A_2 + A_1$	[1]
738	$D_4 + 3A_2 + 3A_1$	[1]
739	$D_4 + 2A_2 + 5A_1$	[1]
740	$D_4 + A_2 + 7A_1$	[2]
741	$D_4 + 9A_1$	[2, 2]
742	A_{13}	[1]
743	$A_{12} + A_1$	[1]
744	$A_{11} + A_2$	[1]
745	$A_{11} + 2A_1$	[1] , [2]
746	$A_{10} + A_3$	[1]
747	$A_{10} + A_2 + A_1$	[1]
748	$A_{10} + 3A_1$	[1]
749	$A_9 + A_4$	[1]
750	$A_9 + A_3 + A_1$	[1] , [2]
751	$A_9 + 2A_2$	[1]
752	$A_9 + A_2 + 2A_1$	[1]
753	$A_9 + 4A_1$	[1] , [2]
754	$A_8 + A_5$	[1]
755	$A_8 + A_4 + A_1$	[1]
756	$A_8 + A_3 + A_2$	[1]
757	$A_8 + A_3 + 2A_1$	[1]
758	$A_8 + 2A_2 + A_1$	[1]
759	$A_8 + A_2 + 3A_1$	[1]
760	$A_8 + 5A_1$	[1]
761	$A_7 + A_6$	[1]
762	$A_7 + A_5 + A_1$	[1] , [2]
763	$A_7 + A_4 + A_2$	[1]
764	$A_7 + A_4 + 2A_1$	[1]
765	$A_7 + 2A_3$	[1] , [2]
766	$A_7 + A_3 + A_2 + A_1$	[1]
767	$A_7 + A_3 + 3A_1$	[1] , [2]
768	$A_7 + 3A_2$	[1]
769	$A_7 + 2A_2 + 2A_1$	[1]
770	$A_7 + A_2 + 4A_1$	[1] , [2]
771	$A_7 + 6A_1$	[1] , [2]
772	$2A_6 + A_1$	[1]
773	$A_6 + A_5 + A_2$	[1]
774	$A_6 + A_5 + 2A_1$	[1]
775	$A_6 + A_4 + A_3$	[1]
776	$A_6 + A_4 + A_2 + A_1$	[1]
777	$A_6 + A_4 + 3A_1$	[1]
778	$A_6 + 2A_3 + A_1$	[1]
779	$A_6 + A_3 + 2A_2$	[1]
780	$A_6 + A_3 + A_2 + 2A_1$	[1]
781	$A_6 + A_3 + 4A_1$	[1]
782	$A_6 + 3A_2 + A_1$	[1]
783	$A_6 + 2A_2 + 3A_1$	[1]
784	$A_6 + A_2 + 5A_1$	[1]
785	$A_6 + 7A_1$	[1]
786	$2A_5 + A_3$	[1] , [2]
787	$2A_5 + A_2 + A_1$	[1]
788	$2A_5 + 3A_1$	[1] , [2]
789	$A_5 + 2A_4$	[1]
790	$A_5 + A_4 + A_3 + A_1$	[1]
791	$A_5 + A_4 + 2A_2$	[1]
792	$A_5 + A_4 + A_2 + 2A_1$	[1]
793	$A_5 + A_4 + 4A_1$	[1]
794	$A_5 + 2A_3 + A_2$	[1]
795	$A_5 + 2A_3 + 2A_1$	[1] , [2]
796	$A_5 + A_3 + 2A_2 + A_1$	[1]
797	$A_5 + A_3 + A_2 + 3A_1$	[1] , [2]
798	$A_5 + A_3 + 5A_1$	[1] , [2]
799	$A_5 + 4A_2$	[1] , [3]
800	$A_5 + 3A_2 + 2A_1$	[1]
801	$A_5 + 2A_2 + 4A_1$	[1]
802	$A_5 + A_2 + 6A_1$	[1] , [2]
803	$A_5 + 8A_1$	[2]
804	$3A_4 + A_1$	[1]
805	$2A_4 + A_3 + A_2$	[1]
806	$2A_4 + A_3 + 2A_1$	[1]
807	$2A_4 + 2A_2 + A_1$	[1]
808	$2A_4 + A_2 + 3A_1$	[1]
809	$2A_4 + 5A_1$	[1]
810	$A_4 + 3A_3$	[1]
811	$A_4 + 2A_3 + A_2 + A_1$	[1]
812	$A_4 + 2A_3 + 3A_1$	[1]
813	$A_4 + A_3 + 3A_2$	[1]
814	$A_4 + A_3 + 2A_2 + 2A_1$	[1]

815	$A_4 + A_3 + A_2 + 4A_1$	[1]
816	$A_4 + A_3 + 6A_1$	[1] , [2]
817	$A_4 + 4A_2 + A_1$	[1]
818	$A_4 + 3A_2 + 3A_1$	[1]
819	$A_4 + 2A_2 + 5A_1$	[1]
820	$A_4 + A_2 + 7A_1$	[1]
821	$A_4 + 9A_1$	[2]
822	$4A_3 + A_1$	[1] , [2]
823	$3A_3 + 2A_2$	[1]
824	$3A_3 + A_2 + 2A_1$	[1] , [2]
825	$3A_3 + 4A_1$	[1] , [2]
826	$2A_3 + 3A_2 + A_1$	[1]
827	$2A_3 + 2A_2 + 3A_1$	[1]
828	$2A_3 + A_2 + 5A_1$	[1] , [2]
829	$2A_3 + 7A_1$	[2]
830	$A_3 + 5A_2$	[1]
831	$A_3 + 4A_2 + 2A_1$	[1]
832	$A_3 + 3A_2 + 4A_1$	[1]
833	$A_3 + 2A_2 + 6A_1$	[1] , [2]
834	$A_3 + A_2 + 8A_1$	[2]
835	$A_3 + 10A_1$	[2, 2]
836	$6A_2 + A_1$	[1] , [3]
837	$5A_2 + 3A_1$	[1]
838	$4A_2 + 5A_1$	[1]
839	$3A_2 + 7A_1$	[1]
840	$2A_2 + 9A_1$	[2]

rank 14

841	$E_8 + E_6$	[1]
842	$E_8 + D_6$	[1]
843	$E_8 + D_5 + A_1$	[1]
844	$E_8 + D_4 + A_2$	[1]
845	$E_8 + D_4 + 2A_1$	[1]
846	$E_8 + A_6$	[1]
847	$E_8 + A_5 + A_1$	[1]
848	$E_8 + A_4 + A_2$	[1]
849	$E_8 + A_4 + 2A_1$	[1]
850	$E_8 + 2A_3$	[1]
851	$E_8 + A_3 + A_2 + A_1$	[1]
852	$E_8 + A_3 + 3A_1$	[1]
853	$E_8 + 3A_2$	[1]
854	$E_8 + 2A_2 + 2A_1$	[1]
855	$E_8 + A_2 + 4A_1$	[1]
856	$E_8 + 6A_1$	[1]
857	$2E_7$	[1]
858	$E_7 + E_6 + A_1$	[1]
859	$E_7 + D_7$	[1]
860	$E_7 + D_6 + A_1$	[1]
861	$E_7 + D_5 + A_2$	[1]
862	$E_7 + D_5 + 2A_1$	[1]
863	$E_7 + D_4 + A_3$	[1]
864	$E_7 + D_4 + A_2 + A_1$	[1]
865	$E_7 + D_4 + 3A_1$	[1] , [2]
866	$E_7 + A_7$	[1]
867	$E_7 + A_6 + A_1$	[1]
868	$E_7 + A_5 + A_2$	[1]
869	$E_7 + A_5 + 2A_1$	[1] , [2]
870	$E_7 + A_4 + A_3$	[1]
871	$E_7 + A_4 + A_2 + A_1$	[1]
872	$E_7 + A_4 + 3A_1$	[1]
873	$E_7 + 2A_3 + A_1$	[1] , [2]
874	$E_7 + A_3 + 2A_2$	[1]
875	$E_7 + A_3 + A_2 + 2A_1$	[1]
876	$E_7 + A_3 + 4A_1$	[1] , [2]
877	$E_7 + 3A_2 + A_1$	[1]
878	$E_7 + 2A_2 + 3A_1$	[1]
879	$E_7 + A_2 + 5A_1$	[1] , [2]
880	$E_7 + 7A_1$	[2]
881	$2E_6 + A_2$	[1]
882	$2E_6 + 2A_1$	[1]
883	$E_6 + D_8$	[1]
884	$E_6 + D_7 + A_1$	[1]
885	$E_6 + D_6 + A_2$	[1]
886	$E_6 + D_6 + 2A_1$	[1]
887	$E_6 + D_5 + A_3$	[1]
888	$E_6 + D_5 + A_2 + A_1$	[1]
889	$E_6 + D_5 + 3A_1$	[1]
890	$E_6 + 2D_4$	[1]
891	$E_6 + D_4 + A_4$	[1]
892	$E_6 + D_4 + A_3 + A_1$	[1]
893	$E_6 + D_4 + 2A_2$	[1]
894	$E_6 + D_4 + A_2 + 2A_1$	[1]
895	$E_6 + D_4 + 4A_1$	[1]
896	$E_6 + A_8$	[1]
897	$E_6 + A_7 + A_1$	[1]
898	$E_6 + A_6 + A_2$	[1]
899	$E_6 + A_6 + 2A_1$	[1]
900	$E_6 + A_5 + A_3$	[1]
901	$E_6 + A_5 + A_2 + A_1$	[1]
902	$E_6 + A_5 + 3A_1$	[1]
903	$E_6 + 2A_4$	[1]
904	$E_6 + A_4 + A_3 + A_1$	[1]
905	$E_6 + A_4 + 2A_2$	[1]
906	$E_6 + A_4 + A_2 + 2A_1$	[1]
907	$E_6 + A_4 + 4A_1$	[1]
908	$E_6 + 2A_3 + A_2$	[1]
909	$E_6 + 2A_3 + 2A_1$	[1]
910	$E_6 + A_3 + 2A_2 + A_1$	[1]
911	$E_6 + A_3 + A_2 + 3A_1$	[1]
912	$E_6 + A_3 + 5A_1$	[1]
913	$E_6 + 4A_2$	[1] , [3]
914	$E_6 + 3A_2 + 2A_1$	[1]
915	$E_6 + 2A_2 + 4A_1$	[1]
916	$E_6 + A_2 + 6A_1$	[1]
917	$E_6 + 8A_1$	empty
918	D_{14}	[1]
919	$D_{13} + A_1$	[1]
920	$D_{12} + A_2$	[1]
921	$D_{12} + 2A_1$	[1] , [2]
922	$D_{11} + A_3$	[1]
923	$D_{11} + A_2 + A_1$	[1]
924	$D_{11} + 3A_1$	[1]
925	$D_{10} + D_4$	[1]
926	$D_{10} + A_4$	[1]
927	$D_{10} + A_3 + A_1$	[1] , [2]
928	$D_{10} + 2A_2$	[1]
929	$D_{10} + A_2 + 2A_1$	[1]
930	$D_{10} + 4A_1$	[1] , [2]
931	$D_9 + D_5$	[1]
932	$D_9 + D_4 + A_1$	[1]

Table 1 (rank 14)

933	$D_9 + A_5$	[1]
934	$D_9 + A_4 + A_1$	[1]
935	$D_9 + A_3 + A_2$	[1]
936	$D_9 + A_3 + 2A_1$	[1]
937	$D_9 + 2A_2 + A_1$	[1]
938	$D_9 + A_2 + 3A_1$	[1]
939	$D_9 + 5A_1$	[1]
940	$D_8 + D_6$	[1]
941	$D_8 + D_5 + A_1$	[1]
942	$D_8 + D_4 + A_2$	[1]
943	$D_8 + D_4 + 2A_1$	[1] , [2]
944	$D_8 + A_6$	[1]
945	$D_8 + A_5 + A_1$	[1] , [2]
946	$D_8 + A_4 + A_2$	[1]
947	$D_8 + A_4 + 2A_1$	[1]
948	$D_8 + 2A_3$	[1] , [2]
949	$D_8 + A_3 + A_2 + A_1$	[1]
950	$D_8 + A_3 + 3A_1$	[1] , [2]
951	$D_8 + 3A_2$	[1]
952	$D_8 + 2A_2 + 2A_1$	[1]
953	$D_8 + A_2 + 4A_1$	[1] , [2]
954	$D_8 + 6A_1$	[2]
955	$2D_7$	[1]
956	$D_7 + D_6 + A_1$	[1]
957	$D_7 + D_5 + A_2$	[1]
958	$D_7 + D_5 + 2A_1$	[1]
959	$D_7 + D_4 + A_3$	[1]
960	$D_7 + D_4 + A_2 + A_1$	[1]
961	$D_7 + D_4 + 3A_1$	[1]
962	$D_7 + A_7$	[1]
963	$D_7 + A_6 + A_1$	[1]
964	$D_7 + A_5 + A_2$	[1]
965	$D_7 + A_5 + 2A_1$	[1]
966	$D_7 + A_4 + A_3$	[1]
967	$D_7 + A_4 + A_2 + A_1$	[1]
968	$D_7 + A_4 + 3A_1$	[1]
969	$D_7 + 2A_3 + A_1$	[1]
970	$D_7 + A_3 + 2A_2$	[1]
971	$D_7 + A_3 + A_2 + 2A_1$	[1]
972	$D_7 + A_3 + 4A_1$	[1] , [2]
973	$D_7 + 3A_2 + A_1$	[1]
974	$D_7 + 2A_2 + 3A_1$	[1]
975	$D_7 + A_2 + 5A_1$	[1]
976	$D_7 + 7A_1$	[2]
977	$2D_6 + A_2$	[1]
978	$2D_6 + 2A_1$	[1] , [2]
979	$D_6 + D_5 + A_3$	[1]
980	$D_6 + D_5 + A_2 + A_1$	[1]
981	$D_6 + D_5 + 3A_1$	[1] , [2]
982	$D_6 + 2D_4$	[1]
983	$D_6 + D_4 + A_4$	[1]
984	$D_6 + D_4 + A_3 + A_1$	[1] , [2]
985	$D_6 + D_4 + 2A_2$	[1]
986	$D_6 + D_4 + A_2 + 2A_1$	[1]
987	$D_6 + D_4 + 4A_1$	[2]
988	$D_6 + A_8$	[1]
989	$D_6 + A_7 + A_1$	[1] , [2]
990	$D_6 + A_6 + A_2$	[1]
991	$D_6 + A_6 + 2A_1$	[1]
992	$D_6 + A_5 + A_3$	[1] , [2]
993	$D_6 + A_5 + A_2 + A_1$	[1]
994	$D_6 + A_5 + 3A_1$	[1] , [2]
995	$D_6 + 2A_4$	[1]
996	$D_6 + A_4 + A_3 + A_1$	[1]
997	$D_6 + A_4 + 2A_2$	[1]
998	$D_6 + A_4 + A_2 + 2A_1$	[1]
999	$D_6 + A_4 + 4A_1$	[1]
1000	$D_6 + 2A_3 + A_2$	[1]
1001	$D_6 + 2A_3 + 2A_1$	[1] , [2]
1002	$D_6 + A_3 + 2A_2 + A_1$	[1]
1003	$D_6 + A_3 + A_2 + 3A_1$	[1] , [2]
1004	$D_6 + A_3 + 5A_1$	[2]
1005	$D_6 + 4A_2$	[1]
1006	$D_6 + 3A_2 + 2A_1$	[1]
1007	$D_6 + 2A_2 + 4A_1$	[1]
1008	$D_6 + A_2 + 6A_1$	[2]
1009	$D_6 + 8A_1$	[2, 2]
1010	$2D_5 + D_4$	[1]
1011	$2D_5 + A_4$	[1]
1012	$2D_5 + A_3 + A_1$	[1]
1013	$2D_5 + 2A_2$	[1]
1014	$2D_5 + A_2 + 2A_1$	[1]
1015	$2D_5 + 4A_1$	[1] , [2]
1016	$D_5 + 2D_4 + A_1$	[1]
1017	$D_5 + D_4 + A_5$	[1]
1018	$D_5 + D_4 + A_4 + A_1$	[1]
1019	$D_5 + D_4 + A_3 + A_2$	[1]
1020	$D_5 + D_4 + A_3 + 2A_1$	[1] , [2]
1021	$D_5 + D_4 + 2A_2 + A_1$	[1]
1022	$D_5 + D_4 + A_2 + 3A_1$	[1]
1023	$D_5 + D_4 + 5A_1$	[2]
1024	$D_5 + A_9$	[1]
1025	$D_5 + A_8 + A_1$	[1]
1026	$D_5 + A_7 + A_2$	[1]
1027	$D_5 + A_7 + 2A_1$	[1] , [2]
1028	$D_5 + A_6 + A_3$	[1]
1029	$D_5 + A_6 + A_2 + A_1$	[1]
1030	$D_5 + A_6 + 3A_1$	[1]
1031	$D_5 + A_5 + A_4$	[1]
1032	$D_5 + A_5 + A_3 + A_1$	[1] , [2]
1033	$D_5 + A_5 + 2A_2$	[1]
1034	$D_5 + A_5 + A_2 + 2A_1$	[1]
1035	$D_5 + A_5 + 4A_1$	[1] , [2]
1036	$D_5 + 2A_4 + A_1$	[1]
1037	$D_5 + A_4 + A_3 + A_2$	[1]
1038	$D_5 + A_4 + A_3 + 2A_1$	[1]
1039	$D_5 + A_4 + 2A_2 + A_1$	[1]
1040	$D_5 + A_4 + A_2 + 3A_1$	[1]
1041	$D_5 + A_4 + 5A_1$	[1]
1042	$D_5 + 3A_3$	[1] , [2]
1043	$D_5 + 2A_3 + A_2 + A_1$	[1]
1044	$D_5 + 2A_3 + 3A_1$	[1] , [2]
1045	$D_5 + A_3 + 3A_2$	[1]
1046	$D_5 + A_3 + 2A_2 + 2A_1$	[1]
1047	$D_5 + A_3 + A_2 + 4A_1$	[1] , [2]
1048	$D_5 + A_3 + 6A_1$	[2]
1049	$D_5 + 4A_2 + A_1$	[1]
1050	$D_5 + 3A_2 + 3A_1$	[1]
1051	$D_5 + 2A_2 + 5A_1$	[1]
1052	$D_5 + A_2 + 7A_1$	[2]

Table 1 (rank 14)

1053	$3\,D_4 + A_2$	[1]
1054	$3\,D_4 + 2\,A_1$	[2]
1055	$2\,D_4 + A_6$	[1]
1056	$2\,D_4 + A_5 + A_1$	[1] , [2]
1057	$2\,D_4 + A_4 + A_2$	[1]
1058	$2\,D_4 + A_4 + 2\,A_1$	[1]
1059	$2\,D_4 + 2\,A_3$	[1] , [2]
1060	$2\,D_4 + A_3 + A_2 + A_1$	[1]
1061	$2\,D_4 + A_3 + 3\,A_1$	[2]
1062	$2\,D_4 + 3\,A_2$	[1]
1063	$2\,D_4 + 2\,A_2 + 2\,A_1$	[1]
1064	$2\,D_4 + A_2 + 4\,A_1$	[2]
1065	$2\,D_4 + 6\,A_1$	[2, 2]
1066	$D_4 + A_{10}$	[1]
1067	$D_4 + A_9 + A_1$	[1] , [2]
1068	$D_4 + A_8 + A_2$	[1]
1069	$D_4 + A_8 + 2\,A_1$	[1]
1070	$D_4 + A_7 + A_3$	[1] , [2]
1071	$D_4 + A_7 + A_2 + A_1$	[1]
1072	$D_4 + A_7 + 3\,A_1$	[1] , [2]
1073	$D_4 + A_6 + A_4$	[1]
1074	$D_4 + A_6 + A_3 + A_1$	[1]
1075	$D_4 + A_6 + 2\,A_2$	[1]
1076	$D_4 + A_6 + A_2 + 2\,A_1$	[1]
1077	$D_4 + A_6 + 4\,A_1$	[1]
1078	$D_4 + 2\,A_5$	[1] , [2]
1079	$D_4 + A_5 + A_4 + A_1$	[1]
1080	$D_4 + A_5 + A_3 + A_2$	[1]
1081	$D_4 + A_5 + A_3 + 2\,A_1$	[1] , [2]
1082	$D_4 + A_5 + 2\,A_2 + A_1$	[1]
1083	$D_4 + A_5 + A_2 + 3\,A_1$	[1] , [2]
1084	$D_4 + A_5 + 5\,A_1$	[2]
1085	$D_4 + 2\,A_4 + A_2$	[1]
1086	$D_4 + 2\,A_4 + 2\,A_1$	[1]
1087	$D_4 + A_4 + 2\,A_3$	[1]
1088	$D_4 + A_4 + A_3 + A_2 + A_1$	[1]
1089	$D_4 + A_4 + A_3 + 3\,A_1$	[1]
1090	$D_4 + A_4 + 3\,A_2$	[1]
1091	$D_4 + A_4 + 2\,A_2 + 2\,A_1$	[1]
1092	$D_4 + A_4 + A_2 + 4\,A_1$	[1]
1093	$D_4 + A_4 + 6\,A_1$	[2]
1094	$D_4 + 3\,A_3 + A_1$	[1] , [2]
1095	$D_4 + 2\,A_3 + 2\,A_2$	[1]
1096	$D_4 + 2\,A_3 + A_2 + 2\,A_1$	[1] , [2]
1097	$D_4 + 2\,A_3 + 4\,A_1$	[2]
1098	$D_4 + A_3 + 3\,A_2 + A_1$	[1]
1099	$D_4 + A_3 + 2\,A_2 + 3\,A_1$	[1]
1100	$D_4 + A_3 + A_2 + 5\,A_1$	[2]
1101	$D_4 + A_3 + 7\,A_1$	[2, 2]
1102	$D_4 + 5\,A_2$	[1]
1103	$D_4 + 4\,A_2 + 2\,A_1$	[1]
1104	$D_4 + 3\,A_2 + 4\,A_1$	[1]
1105	$D_4 + 2\,A_2 + 6\,A_1$	[2]
1106	A_{14}	[1]
1107	$A_{13} + A_1$	[1] , [2]
1108	$A_{12} + A_2$	[1]
1109	$A_{12} + 2\,A_1$	[1]
1110	$A_{11} + A_3$	[1] , [2]
1111	$A_{11} + A_2 + A_1$	[1]
1112	$A_{11} + 3\,A_1$	[1] , [2]

1113	$A_{10} + A_4$	[1]
1114	$A_{10} + A_3 + A_1$	[1]
1115	$A_{10} + 2\,A_2$	[1]
1116	$A_{10} + A_2 + 2\,A_1$	[1]
1117	$A_{10} + 4\,A_1$	[1]
1118	$A_9 + A_5$	[1] , [2]
1119	$A_9 + A_4 + A_1$	[1]
1120	$A_9 + A_3 + A_2$	[1]
1121	$A_9 + A_3 + 2\,A_1$	[1] , [2]
1122	$A_9 + 2\,A_2 + A_1$	[1]
1123	$A_9 + A_2 + 3\,A_1$	[1] , [2]
1124	$A_9 + 5\,A_1$	[1] , [2]
1125	$A_8 + A_6$	[1]
1126	$A_8 + A_5 + A_1$	[1]
1127	$A_8 + A_4 + A_2$	[1]
1128	$A_8 + A_4 + 2\,A_1$	[1]
1129	$A_8 + 2\,A_3$	[1]
1130	$A_8 + A_3 + A_2 + A_1$	[1]
1131	$A_8 + A_3 + 3\,A_1$	[1]
1132	$A_8 + 3\,A_2$	[1] , [3]
1133	$A_8 + 2\,A_2 + 2\,A_1$	[1]
1134	$A_8 + A_2 + 4\,A_1$	[1]
1135	$A_8 + 6\,A_1$	[1]
1136	$2\,A_7$	[1] , [2]
1137	$A_7 + A_6 + A_1$	[1]
1138	$A_7 + A_5 + A_2$	[1]
1139	$A_7 + A_5 + 2\,A_1$	[1] , [2]
1140	$A_7 + A_4 + A_3$	[1]
1141	$A_7 + A_4 + A_2 + A_1$	[1]
1142	$A_7 + A_4 + 3\,A_1$	[1]
1143	$A_7 + 2\,A_3 + A_1$	[1] , [2]
1144	$A_7 + A_3 + 2\,A_2$	[1]
1145	$A_7 + A_3 + A_2 + 2\,A_1$	[1] , [2]
1146	$A_7 + A_3 + 4\,A_1$	[1] , [2]
1147	$A_7 + 3\,A_2 + A_1$	[1]
1148	$A_7 + 2\,A_2 + 3\,A_1$	[1]
1149	$A_7 + A_2 + 5\,A_1$	[1] , [2]
1150	$A_7 + 7\,A_1$	[2]
1151	$2\,A_6 + A_2$	[1]
1152	$2\,A_6 + 2\,A_1$	[1]
1153	$A_6 + A_5 + A_3$	[1]
1154	$A_6 + A_5 + A_2 + A_1$	[1]
1155	$A_6 + A_5 + 3\,A_1$	[1]
1156	$A_6 + 2\,A_4$	[1]
1157	$A_6 + A_4 + A_3 + A_1$	[1]
1158	$A_6 + A_4 + 2\,A_2$	[1]
1159	$A_6 + A_4 + A_2 + 2\,A_1$	[1]
1160	$A_6 + A_4 + 4\,A_1$	[1]
1161	$A_6 + 2\,A_3 + A_2$	[1]
1162	$A_6 + 2\,A_3 + 2\,A_1$	[1]
1163	$A_6 + A_3 + 2\,A_2 + A_1$	[1]
1164	$A_6 + A_3 + A_2 + 3\,A_1$	[1]
1165	$A_6 + A_3 + 5\,A_1$	[1]
1166	$A_6 + 4\,A_2$	[1]
1167	$A_6 + 3\,A_2 + 2\,A_1$	[1]
1168	$A_6 + 2\,A_2 + 4\,A_1$	[1]
1169	$A_6 + A_2 + 6\,A_1$	[1]
1170	$A_6 + 8\,A_1$	[2]
1171	$2\,A_5 + A_4$	[1]
1172	$2\,A_5 + A_3 + A_1$	[1] , [2]

Table 1 (rank 14 - rank 15)

1173	$2\,A_5 + 2\,A_2$	[1] , [3]
1174	$2\,A_5 + A_2 + 2\,A_1$	[1] , [2]
1175	$2\,A_5 + 4\,A_1$	[1] , [2]
1176	$A_5 + 2\,A_4 + A_1$	[1]
1177	$A_5 + A_4 + A_3 + A_2$	[1]
1178	$A_5 + A_4 + A_3 + 2\,A_1$	[1]
1179	$A_5 + A_4 + 2\,A_2 + A_1$	[1]
1180	$A_5 + A_4 + A_2 + 3\,A_1$	[1]
1181	$A_5 + A_4 + 5\,A_1$	[1] , [2]
1182	$A_5 + 3\,A_3$	[1]
1183	$A_5 + 2\,A_3 + A_2 + A_1$	[1] , [2]
1184	$A_5 + 2\,A_3 + 3\,A_1$	[1] , [2]
1185	$A_5 + A_3 + 3\,A_2$	[1]
1186	$A_5 + A_3 + 2\,A_2 + 2\,A_1$	[1]
1187	$A_5 + A_3 + A_2 + 4\,A_1$	[1] , [2]
1188	$A_5 + A_3 + 6\,A_1$	[2]
1189	$A_5 + 4\,A_2 + A_1$	[1] , [3]
1190	$A_5 + 3\,A_2 + 3\,A_1$	[1]
1191	$A_5 + 2\,A_2 + 5\,A_1$	[1] , [2]
1192	$A_5 + A_2 + 7\,A_1$	[2]
1193	$A_5 + 9\,A_1$	[2, 2]
1194	$3\,A_4 + A_2$	[1]
1195	$3\,A_4 + 2\,A_1$	[1]
1196	$2\,A_4 + 2\,A_3$	[1]
1197	$2\,A_4 + A_3 + A_2 + A_1$	[1]
1198	$2\,A_4 + A_3 + 3\,A_1$	[1]
1199	$2\,A_4 + 3\,A_2$	[1]
1200	$2\,A_4 + 2\,A_2 + 2\,A_1$	[1]
1201	$2\,A_4 + A_2 + 4\,A_1$	[1]
1202	$2\,A_4 + 6\,A_1$	[1]
1203	$A_4 + 3\,A_3 + A_1$	[1]
1204	$A_4 + 2\,A_3 + 2\,A_2$	[1]
1205	$A_4 + 2\,A_3 + A_2 + 2\,A_1$	[1]
1206	$A_4 + 2\,A_3 + 4\,A_1$	[1] , [2]
1207	$A_4 + A_3 + 3\,A_2 + A_1$	[1]
1208	$A_4 + A_3 + 2\,A_2 + 3\,A_1$	[1]
1209	$A_4 + A_3 + A_2 + 5\,A_1$	[1]
1210	$A_4 + A_3 + 7\,A_1$	[2]
1211	$A_4 + 5\,A_2$	[1]
1212	$A_4 + 4\,A_2 + 2\,A_1$	[1]
1213	$A_4 + 3\,A_2 + 4\,A_1$	[1]
1214	$A_4 + 2\,A_2 + 6\,A_1$	[1]
1215	$A_4 + A_2 + 8\,A_1$	[2]
1216	$4\,A_3 + A_2$	[1] , [2]
1217	$4\,A_3 + 2\,A_1$	[1] , [2] , [4]
1218	$3\,A_3 + 2\,A_2 + A_1$	[1]
1219	$3\,A_3 + A_2 + 3\,A_1$	[1] , [2]
1220	$3\,A_3 + 5\,A_1$	[2]
1221	$2\,A_3 + 4\,A_2$	[1]
1222	$2\,A_3 + 3\,A_2 + 2\,A_1$	[1]
1223	$2\,A_3 + 2\,A_2 + 4\,A_1$	[1] , [2]
1224	$2\,A_3 + A_2 + 6\,A_1$	[2]
1225	$2\,A_3 + 8\,A_1$	[2, 2]
1226	$A_3 + 5\,A_2 + A_1$	[1]
1227	$A_3 + 4\,A_2 + 3\,A_1$	[1]
1228	$A_3 + 3\,A_2 + 5\,A_1$	[1]
1229	$A_3 + 2\,A_2 + 7\,A_1$	[2]
1230	$7\,A_2$	[3]
1231	$6\,A_2 + 2\,A_1$	[1] , [3]
1232	$5\,A_2 + 4\,A_1$	[1]
1233	$4\,A_2 + 6\,A_1$	[1]

rank 15

1234	$E_8 + E_7$	[1]
1235	$E_8 + E_6 + A_1$	[1]
1236	$E_8 + D_7$	[1]
1237	$E_8 + D_6 + A_1$	[1]
1238	$E_8 + D_5 + A_2$	[1]
1239	$E_8 + D_5 + 2\,A_1$	[1]
1240	$E_8 + D_4 + A_3$	[1]
1241	$E_8 + D_4 + A_2 + A_1$	[1]
1242	$E_8 + D_4 + 3\,A_1$	[1]
1243	$E_8 + A_7$	[1]
1244	$E_8 + A_6 + A_1$	[1]
1245	$E_8 + A_5 + A_2$	[1]
1246	$E_8 + A_5 + 2\,A_1$	[1]
1247	$E_8 + A_4 + A_3$	[1]
1248	$E_8 + A_4 + A_2 + A_1$	[1]
1249	$E_8 + A_4 + 3\,A_1$	[1]
1250	$E_8 + 2\,A_3 + A_1$	[1]
1251	$E_8 + A_3 + 2\,A_2$	[1]
1252	$E_8 + A_3 + A_2 + 2\,A_1$	[1]
1253	$E_8 + A_3 + 4\,A_1$	[1]
1254	$E_8 + 3\,A_2 + A_1$	[1]
1255	$E_8 + 2\,A_2 + 3\,A_1$	[1]
1256	$E_8 + A_2 + 5\,A_1$	[1]
1257	$E_8 + 7\,A_1$	empty
1258	$2\,E_7 + A_1$	[1]
1259	$E_7 + E_6 + A_2$	[1]
1260	$E_7 + E_6 + 2\,A_1$	[1]
1261	$E_7 + D_8$	[1]
1262	$E_7 + D_7 + A_1$	[1]
1263	$E_7 + D_6 + A_2$	[1]
1264	$E_7 + D_6 + 2\,A_1$	[1] , [2]
1265	$E_7 + D_5 + A_3$	[1]
1266	$E_7 + D_5 + A_2 + A_1$	[1]
1267	$E_7 + D_5 + 3\,A_1$	[1] , [2]
1268	$E_7 + 2\,D_4$	[1]
1269	$E_7 + D_4 + A_4$	[1]
1270	$E_7 + D_4 + A_3 + A_1$	[1] , [2]
1271	$E_7 + D_4 + 2\,A_2$	[1]
1272	$E_7 + D_4 + A_2 + 2\,A_1$	[1]
1273	$E_7 + D_4 + 4\,A_1$	[2]
1274	$E_7 + A_8$	[1]
1275	$E_7 + A_7 + A_1$	[1] , [2]
1276	$E_7 + A_6 + A_2$	[1]
1277	$E_7 + A_6 + 2\,A_1$	[1]
1278	$E_7 + A_5 + A_3$	[1] , [2]
1279	$E_7 + A_5 + A_2 + A_1$	[1]
1280	$E_7 + A_5 + 3\,A_1$	[1] , [2]
1281	$E_7 + 2\,A_4$	[1]
1282	$E_7 + A_4 + A_3 + A_1$	[1]
1283	$E_7 + A_4 + 2\,A_2$	[1]
1284	$E_7 + A_4 + A_2 + 2\,A_1$	[1]
1285	$E_7 + A_4 + 4\,A_1$	[1]
1286	$E_7 + 2\,A_3 + A_2$	[1]
1287	$E_7 + 2\,A_3 + 2\,A_1$	[1] , [2]
1288	$E_7 + A_3 + 2\,A_2 + A_1$	[1]
1289	$E_7 + A_3 + A_2 + 3\,A_1$	[1] , [2]
1290	$E_7 + A_3 + 5\,A_1$	[2]

Table 1 (rank 15)

1291	$E_7 + 4A_2$	[1]
1292	$E_7 + 3A_2 + 2A_1$	[1]
1293	$E_7 + 2A_2 + 4A_1$	[1]
1294	$E_7 + A_2 + 6A_1$	[2]
1295	$2E_6 + A_3$	[1]
1296	$2E_6 + A_2 + A_1$	[1]
1297	$2E_6 + 3A_1$	[1]
1298	$E_6 + D_9$	[1]
1299	$E_6 + D_8 + A_1$	[1]
1300	$E_6 + D_7 + A_2$	[1]
1301	$E_6 + D_7 + 2A_1$	[1]
1302	$E_6 + D_6 + A_3$	[1]
1303	$E_6 + D_6 + A_2 + A_1$	[1]
1304	$E_6 + D_6 + 3A_1$	[1]
1305	$E_6 + D_5 + D_4$	[1]
1306	$E_6 + D_5 + A_4$	[1]
1307	$E_6 + D_5 + A_3 + A_1$	[1]
1308	$E_6 + D_5 + 2A_2$	[1]
1309	$E_6 + D_5 + A_2 + 2A_1$	[1]
1310	$E_6 + D_5 + 4A_1$	[1]
1311	$E_6 + 2D_4 + A_1$	[1]
1312	$E_6 + D_4 + A_5$	[1]
1313	$E_6 + D_4 + A_4 + A_1$	[1]
1314	$E_6 + D_4 + A_3 + A_2$	[1]
1315	$E_6 + D_4 + A_3 + 2A_1$	[1]
1316	$E_6 + D_4 + 2A_2 + A_1$	[1]
1317	$E_6 + D_4 + A_2 + 3A_1$	[1]
1318	$E_6 + D_4 + 5A_1$	empty
1319	$E_6 + A_9$	[1]
1320	$E_6 + A_8 + A_1$	[1]
1321	$E_6 + A_7 + A_2$	[1]
1322	$E_6 + A_7 + 2A_1$	[1]
1323	$E_6 + A_6 + A_3$	[1]
1324	$E_6 + A_6 + A_2 + A_1$	[1]
1325	$E_6 + A_6 + 3A_1$	[1]
1326	$E_6 + A_5 + A_4$	[1]
1327	$E_6 + A_5 + A_3 + A_1$	[1]
1328	$E_6 + A_5 + 2A_2$	[1] , [3]
1329	$E_6 + A_5 + A_2 + 2A_1$	[1]
1330	$E_6 + A_5 + 4A_1$	[1]
1331	$E_6 + 2A_4 + A_1$	[1]
1332	$E_6 + A_4 + A_3 + A_2$	[1]
1333	$E_6 + A_4 + A_3 + 2A_1$	[1]
1334	$E_6 + A_4 + 2A_2 + A_1$	[1]
1335	$E_6 + A_4 + A_2 + 3A_1$	[1]
1336	$E_6 + A_4 + 5A_1$	[1]
1337	$E_6 + 3A_3$	[1]
1338	$E_6 + 2A_3 + A_2 + A_1$	[1]
1339	$E_6 + 2A_3 + 3A_1$	[1]
1340	$E_6 + A_3 + 3A_2$	[1]
1341	$E_6 + A_3 + 2A_2 + 2A_1$	[1]
1342	$E_6 + A_3 + A_2 + 4A_1$	[1]
1343	$E_6 + A_3 + 6A_1$	empty
1344	$E_6 + 4A_2 + A_1$	[1] , [3]
1345	$E_6 + 3A_2 + 3A_1$	[1]
1346	$E_6 + 2A_2 + 5A_1$	[1]
1347	D_{15}	[1]
1348	$D_{14} + A_1$	[1] , [2]
1349	$D_{13} + A_2$	[1]
1350	$D_{13} + 2A_1$	[1]

1351	$D_{12} + A_3$	[1] , [2]
1352	$D_{12} + A_2 + A_1$	[1]
1353	$D_{12} + 3A_1$	[1] , [2]
1354	$D_{11} + D_4$	[1]
1355	$D_{11} + A_4$	[1]
1356	$D_{11} + A_3 + A_1$	[1]
1357	$D_{11} + 2A_2$	[1]
1358	$D_{11} + A_2 + 2A_1$	[1]
1359	$D_{11} + 4A_1$	[1]
1360	$D_{10} + D_5$	[1]
1361	$D_{10} + D_4 + A_1$	[1] , [2]
1362	$D_{10} + A_5$	[1] , [2]
1363	$D_{10} + A_4 + A_1$	[1]
1364	$D_{10} + A_3 + A_2$	[1]
1365	$D_{10} + A_3 + 2A_1$	[1] , [2]
1366	$D_{10} + 2A_2 + A_1$	[1]
1367	$D_{10} + A_2 + 3A_1$	[1] , [2]
1368	$D_{10} + 5A_1$	[2]
1369	$D_9 + D_6$	[1]
1370	$D_9 + D_5 + A_1$	[1]
1371	$D_9 + D_4 + A_2$	[1]
1372	$D_9 + D_4 + 2A_1$	[1]
1373	$D_9 + A_6$	[1]
1374	$D_9 + A_5 + A_1$	[1]
1375	$D_9 + A_4 + A_2$	[1]
1376	$D_9 + A_4 + 2A_1$	[1]
1377	$D_9 + 2A_3$	[1]
1378	$D_9 + A_3 + A_2 + A_1$	[1]
1379	$D_9 + A_3 + 3A_1$	[1]
1380	$D_9 + 3A_2$	[1]
1381	$D_9 + 2A_2 + 2A_1$	[1]
1382	$D_9 + A_2 + 4A_1$	[1]
1383	$D_9 + 6A_1$	[2]
1384	$D_8 + D_7$	[1]
1385	$D_8 + D_6 + A_1$	[1] , [2]
1386	$D_8 + D_5 + A_2$	[1]
1387	$D_8 + D_5 + 2A_1$	[1] , [2]
1388	$D_8 + D_4 + A_3$	[1] , [2]
1389	$D_8 + D_4 + A_2 + A_1$	[1]
1390	$D_8 + D_4 + 3A_1$	[2]
1391	$D_8 + A_7$	[1] , [2]
1392	$D_8 + A_6 + A_1$	[1]
1393	$D_8 + A_5 + A_2$	[1]
1394	$D_8 + A_5 + 2A_1$	[1] , [2]
1395	$D_8 + A_4 + A_3$	[1]
1396	$D_8 + A_4 + A_2 + A_1$	[1]
1397	$D_8 + A_4 + 3A_1$	[1]
1398	$D_8 + 2A_3 + A_1$	[1] , [2]
1399	$D_8 + A_3 + 2A_2$	[1]
1400	$D_8 + A_3 + A_2 + 2A_1$	[1] , [2]
1401	$D_8 + A_3 + 4A_1$	[2]
1402	$D_8 + 3A_2 + A_1$	[1]
1403	$D_8 + 2A_2 + 3A_1$	[1]
1404	$D_8 + A_2 + 5A_1$	[2]
1405	$D_8 + 7A_1$	[2, 2]
1406	$2D_7 + A_1$	[1]
1407	$D_7 + D_6 + A_2$	[1]
1408	$D_7 + D_6 + 2A_1$	[1]
1409	$D_7 + D_5 + A_3$	[1]
1410	$D_7 + D_5 + A_2 + A_1$	[1]

Table 1 (rank 15)

1411	$D_7 + D_5 + 3A_1$	[1]
1412	$D_7 + 2D_4$	[1]
1413	$D_7 + D_4 + A_4$	[1]
1414	$D_7 + D_4 + A_3 + A_1$	[1]
1415	$D_7 + D_4 + 2A_2$	[1]
1416	$D_7 + D_4 + A_2 + 2A_1$	[1]
1417	$D_7 + D_4 + 4A_1$	[2]
1418	$D_7 + A_8$	[1]
1419	$D_7 + A_7 + A_1$	[1]
1420	$D_7 + A_6 + A_2$	[1]
1421	$D_7 + A_6 + 2A_1$	[1]
1422	$D_7 + A_5 + A_3$	[1]
1423	$D_7 + A_5 + A_2 + A_1$	[1]
1424	$D_7 + A_5 + 3A_1$	[1] , [2]
1425	$D_7 + 2A_4$	[1]
1426	$D_7 + A_4 + A_3 + A_1$	[1]
1427	$D_7 + A_4 + 2A_2$	[1]
1428	$D_7 + A_4 + A_2 + 2A_1$	[1]
1429	$D_7 + A_4 + 4A_1$	[1]
1430	$D_7 + 2A_3 + A_2$	[1]
1431	$D_7 + 2A_3 + 2A_1$	[1] , [2]
1432	$D_7 + A_3 + 2A_2 + A_1$	[1]
1433	$D_7 + A_3 + A_2 + 3A_1$	[1]
1434	$D_7 + A_3 + 5A_1$	[2]
1435	$D_7 + 4A_2$	[1]
1436	$D_7 + 3A_2 + 2A_1$	[1]
1437	$D_7 + 2A_2 + 4A_1$	[1]
1438	$D_7 + A_2 + 6A_1$	[2]
1439	$2D_6 + A_3$	[1] , [2]
1440	$2D_6 + A_2 + A_1$	[1]
1441	$2D_6 + 3A_1$	[2]
1442	$D_6 + D_5 + D_4$	[1]
1443	$D_6 + D_5 + A_4$	[1]
1444	$D_6 + D_5 + A_3 + A_1$	[1] , [2]
1445	$D_6 + D_5 + 2A_2$	[1]
1446	$D_6 + D_5 + A_2 + 2A_1$	[1]
1447	$D_6 + D_5 + 4A_1$	[2]
1448	$D_6 + 2D_4 + A_1$	[2]
1449	$D_6 + D_4 + A_5$	[1] , [2]
1450	$D_6 + D_4 + A_4 + A_1$	[1]
1451	$D_6 + D_4 + A_3 + A_2$	[1]
1452	$D_6 + D_4 + A_3 + 2A_1$	[2]
1453	$D_6 + D_4 + 2A_2 + A_1$	[1]
1454	$D_6 + D_4 + A_2 + 3A_1$	[2]
1455	$D_6 + D_4 + 5A_1$	[2, 2]
1456	$D_6 + A_9$	[1] , [2]
1457	$D_6 + A_8 + A_1$	[1]
1458	$D_6 + A_7 + A_2$	[1]
1459	$D_6 + A_7 + 2A_1$	[1] , [2]
1460	$D_6 + A_6 + A_3$	[1]
1461	$D_6 + A_6 + A_2 + A_1$	[1]
1462	$D_6 + A_6 + 3A_1$	[1]
1463	$D_6 + A_5 + A_4$	[1]
1464	$D_6 + A_5 + A_3 + A_1$	[1] , [2]
1465	$D_6 + A_5 + 2A_2$	[1]
1466	$D_6 + A_5 + A_2 + 2A_1$	[1] , [2]
1467	$D_6 + A_5 + 4A_1$	[2]
1468	$D_6 + 2A_4 + A_1$	[1]
1469	$D_6 + A_4 + A_3 + A_2$	[1]
1470	$D_6 + A_4 + A_3 + 2A_1$	[1]
1471	$D_6 + A_4 + 2A_2 + A_1$	[1]
1472	$D_6 + A_4 + A_2 + 3A_1$	[1]
1473	$D_6 + A_4 + 5A_1$	[2]
1474	$D_6 + 3A_3$	[1] , [2]
1475	$D_6 + 2A_3 + A_2 + A_1$	[1] , [2]
1476	$D_6 + 2A_3 + 3A_1$	[2]
1477	$D_6 + A_3 + 3A_2$	[1]
1478	$D_6 + A_3 + 2A_2 + 2A_1$	[1]
1479	$D_6 + A_3 + A_2 + 4A_1$	[2]
1480	$D_6 + A_3 + 6A_1$	[2, 2]
1481	$D_6 + 4A_2 + A_1$	[1]
1482	$D_6 + 3A_2 + 3A_1$	[1]
1483	$D_6 + 2A_2 + 5A_1$	[2]
1484	$3D_5$	[1]
1485	$2D_5 + D_4 + A_1$	[1]
1486	$2D_5 + A_5$	[1]
1487	$2D_5 + A_4 + A_1$	[1]
1488	$2D_5 + A_3 + A_2$	[1]
1489	$2D_5 + A_3 + 2A_1$	[1] , [2]
1490	$2D_5 + 2A_2 + A_1$	[1]
1491	$2D_5 + A_2 + 3A_1$	[1]
1492	$2D_5 + 5A_1$	[2]
1493	$D_5 + 2D_4 + A_2$	[1]
1494	$D_5 + 2D_4 + 2A_1$	[2]
1495	$D_5 + D_4 + A_6$	[1]
1496	$D_5 + D_4 + A_5 + A_1$	[1] , [2]
1497	$D_5 + D_4 + A_4 + A_2$	[1]
1498	$D_5 + D_4 + A_4 + 2A_1$	[1]
1499	$D_5 + D_4 + 2A_3$	[1] , [2]
1500	$D_5 + D_4 + A_3 + A_2 + A_1$	[1]
1501	$D_5 + D_4 + A_3 + 3A_1$	[2]
1502	$D_5 + D_4 + 3A_2$	[1]
1503	$D_5 + D_4 + 2A_2 + 2A_1$	[1]
1504	$D_5 + D_4 + A_2 + 4A_1$	[2]
1505	$D_5 + A_{10}$	[1]
1506	$D_5 + A_9 + A_1$	[1] , [2]
1507	$D_5 + A_8 + A_2$	[1]
1508	$D_5 + A_8 + 2A_1$	[1]
1509	$D_5 + A_7 + A_3$	[1] , [2]
1510	$D_5 + A_7 + A_2 + A_1$	[1]
1511	$D_5 + A_7 + 3A_1$	[1] , [2]
1512	$D_5 + A_6 + A_4$	[1]
1513	$D_5 + A_6 + A_3 + A_1$	[1]
1514	$D_5 + A_6 + 2A_2$	[1]
1515	$D_5 + A_6 + A_2 + 2A_1$	[1]
1516	$D_5 + A_6 + 4A_1$	[1]
1517	$D_5 + 2A_5$	[1] , [2]
1518	$D_5 + A_5 + A_4 + A_1$	[1]
1519	$D_5 + A_5 + A_3 + A_2$	[1]
1520	$D_5 + A_5 + A_3 + 2A_1$	[1] , [2]
1521	$D_5 + A_5 + 2A_2 + A_1$	[1]
1522	$D_5 + A_5 + A_2 + 3A_1$	[1] , [2]
1523	$D_5 + A_5 + 5A_1$	[2]
1524	$D_5 + 2A_4 + A_2$	[1]
1525	$D_5 + 2A_4 + 2A_1$	[1]
1526	$D_5 + A_4 + 2A_3$	[1]
1527	$D_5 + A_4 + A_3 + A_2 + A_1$	[1]
1528	$D_5 + A_4 + A_3 + 3A_1$	[1]
1529	$D_5 + A_4 + 3A_2$	[1]
1530	$D_5 + A_4 + 2A_2 + 2A_1$	[1]

Table 1 (rank 15)

1531	$D_5 + A_4 + A_2 + 4A_1$	[1]
1532	$D_5 + A_4 + 6A_1$	[2]
1533	$D_5 + 3A_3 + A_1$	[1] , [2] , [4]
1534	$D_5 + 2A_3 + 2A_2$	[1]
1535	$D_5 + 2A_3 + A_2 + 2A_1$	[1] , [2]
1536	$D_5 + 2A_3 + 4A_1$	[2]
1537	$D_5 + A_3 + 3A_2 + A_1$	[1]
1538	$D_5 + A_3 + 2A_2 + 3A_1$	[1]
1539	$D_5 + A_3 + A_2 + 5A_1$	[2]
1540	$D_5 + 5A_2$	[1]
1541	$D_5 + 4A_2 + 2A_1$	[1]
1542	$D_5 + 3A_2 + 4A_1$	[1]
1543	$3D_4 + A_3$	[2]
1544	$3D_4 + A_2 + A_1$	empty
1545	$3D_4 + 3A_1$	[2, 2]
1546	$2D_4 + A_7$	[1] , [2]
1547	$2D_4 + A_6 + A_1$	[1]
1548	$2D_4 + A_5 + A_2$	[1]
1549	$2D_4 + A_5 + 2A_1$	[2]
1550	$2D_4 + A_4 + A_3$	[1]
1551	$2D_4 + A_4 + A_2 + A_1$	[1]
1552	$2D_4 + A_4 + 3A_1$	empty
1553	$2D_4 + 2A_3 + A_1$	[2]
1554	$2D_4 + A_3 + 2A_2$	empty
1555	$2D_4 + A_3 + A_2 + 2A_1$	[2]
1556	$2D_4 + A_3 + 4A_1$	[2, 2]
1557	$2D_4 + 3A_2 + A_1$	[1]
1558	$2D_4 + 2A_2 + 3A_1$	empty
1559	$D_4 + A_{11}$	[1] , [2]
1560	$D_4 + A_{10} + A_1$	[1]
1561	$D_4 + A_9 + A_2$	[1]
1562	$D_4 + A_9 + 2A_1$	[1] , [2]
1563	$D_4 + A_8 + A_3$	[1]
1564	$D_4 + A_8 + A_2 + A_1$	[1]
1565	$D_4 + A_8 + 3A_1$	[1]
1566	$D_4 + A_7 + A_4$	[1]
1567	$D_4 + A_7 + A_3 + A_1$	[1] , [2]
1568	$D_4 + A_7 + 2A_2$	[1]
1569	$D_4 + A_7 + A_2 + 2A_1$	[1] , [2]
1570	$D_4 + A_7 + 4A_1$	[2]
1571	$D_4 + A_6 + A_5$	[1]
1572	$D_4 + A_6 + A_4 + A_1$	[1]
1573	$D_4 + A_6 + A_3 + A_2$	[1]
1574	$D_4 + A_6 + A_3 + 2A_1$	[1]
1575	$D_4 + A_6 + 2A_2 + A_1$	[1]
1576	$D_4 + A_6 + A_2 + 3A_1$	[1]
1577	$D_4 + A_6 + 5A_1$	empty
1578	$D_4 + 2A_5 + A_1$	[1] , [2]
1579	$D_4 + A_5 + A_4 + A_2$	[1]
1580	$D_4 + A_5 + A_4 + 2A_1$	[1]
1581	$D_4 + A_5 + 2A_3$	[1]
1582	$D_4 + A_5 + A_3 + A_2 + A_1$	[1] , [2]
1583	$D_4 + A_5 + A_3 + 3A_1$	[2]
1584	$D_4 + A_5 + 3A_2$	[1]
1585	$D_4 + A_5 + 2A_2 + 2A_1$	[1]
1586	$D_4 + A_5 + A_2 + 4A_1$	[2]
1587	$D_4 + A_5 + 6A_1$	[2, 2]
1588	$D_4 + 2A_4 + A_3$	[1]
1589	$D_4 + 2A_4 + A_2 + A_1$	[1]
1590	$D_4 + 2A_4 + 3A_1$	[1]
1591	$D_4 + A_4 + 2A_3 + A_1$	[1]
1592	$D_4 + A_4 + A_3 + 2A_2$	[1]
1593	$D_4 + A_4 + A_3 + A_2 + 2A_1$	[1]
1594	$D_4 + A_4 + A_3 + 4A_1$	[2]
1595	$D_4 + A_4 + 3A_2 + A_1$	[1]
1596	$D_4 + A_4 + 2A_2 + 3A_1$	[1]
1597	$D_4 + A_4 + A_2 + 5A_1$	empty
1598	$D_4 + 3A_3 + A_2$	[2]
1599	$D_4 + 3A_3 + 2A_1$	[2]
1600	$D_4 + 2A_3 + 2A_2 + A_1$	[1]
1601	$D_4 + 2A_3 + A_2 + 3A_1$	[2]
1602	$D_4 + 2A_3 + 5A_1$	[2, 2]
1603	$D_4 + A_3 + 4A_2$	[1]
1604	$D_4 + A_3 + 3A_2 + 2A_1$	[1]
1605	$D_4 + A_3 + 2A_2 + 4A_1$	[2]
1606	$D_4 + 5A_2 + A_1$	empty
1607	$D_4 + 4A_2 + 3A_1$	[1]
1608	A_{15}	[1] , [2]
1609	$A_{14} + A_1$	[1]
1610	$A_{13} + A_2$	[1]
1611	$A_{13} + 2A_1$	[1] , [2]
1612	$A_{12} + A_3$	[1]
1613	$A_{12} + A_2 + A_1$	[1]
1614	$A_{12} + 3A_1$	[1]
1615	$A_{11} + A_4$	[1]
1616	$A_{11} + A_3 + A_1$	[1] , [2]
1617	$A_{11} + 2A_2$	[1] , [3]
1618	$A_{11} + A_2 + 2A_1$	[1] , [2]
1619	$A_{11} + 4A_1$	[1] , [2]
1620	$A_{10} + A_5$	[1]
1621	$A_{10} + A_4 + A_1$	[1]
1622	$A_{10} + A_3 + A_2$	[1]
1623	$A_{10} + A_3 + 2A_1$	[1]
1624	$A_{10} + 2A_2 + A_1$	[1]
1625	$A_{10} + A_2 + 3A_1$	[1]
1626	$A_{10} + 5A_1$	[1]
1627	$A_9 + A_6$	[1]
1628	$A_9 + A_5 + A_1$	[1] , [2]
1629	$A_9 + A_4 + A_2$	[1]
1630	$A_9 + A_4 + 2A_1$	[1]
1631	$A_9 + 2A_3$	[1]
1632	$A_9 + A_3 + A_2 + A_1$	[1] , [2]
1633	$A_9 + A_3 + 3A_1$	[1] , [2]
1634	$A_9 + 3A_2$	[1]
1635	$A_9 + 2A_2 + 2A_1$	[1]
1636	$A_9 + A_2 + 4A_1$	[1] , [2]
1637	$A_9 + 6A_1$	[2]
1638	$A_8 + A_7$	[1]
1639	$A_8 + A_6 + A_1$	[1]
1640	$A_8 + A_5 + A_2$	[1] , [3]
1641	$A_8 + A_5 + 2A_1$	[1]
1642	$A_8 + A_4 + A_3$	[1]
1643	$A_8 + A_4 + A_2 + A_1$	[1]
1644	$A_8 + A_4 + 3A_1$	[1]
1645	$A_8 + 2A_3 + A_1$	[1]
1646	$A_8 + A_3 + 2A_2$	[1]
1647	$A_8 + A_3 + A_2 + 2A_1$	[1]
1648	$A_8 + A_3 + 4A_1$	[1]
1649	$A_8 + 3A_2 + A_1$	[1] , [3]
1650	$A_8 + 2A_2 + 3A_1$	[1]

Table 1 (rank 15 - rank 16)

1651	$A_8 + A_2 + 5A_1$	[1]
1652	$A_8 + 7A_1$	empty
1653	$2A_7 + A_1$	[1] , [2]
1654	$A_7 + A_6 + A_2$	[1]
1655	$A_7 + A_6 + 2A_1$	[1]
1656	$A_7 + A_5 + A_3$	[1]
1657	$A_7 + A_5 + A_2 + A_1$	[1] , [2]
1658	$A_7 + A_5 + 3A_1$	[1] , [2]
1659	$A_7 + 2A_4$	[1]
1660	$A_7 + A_4 + A_3 + A_1$	[1]
1661	$A_7 + A_4 + 2A_2$	[1]
1662	$A_7 + A_4 + A_2 + 2A_1$	[1]
1663	$A_7 + A_4 + 4A_1$	[1] , [2]
1664	$A_7 + 2A_3 + A_2$	[1] , [2]
1665	$A_7 + 2A_3 + 2A_1$	[1] , [2] , [4]
1666	$A_7 + A_3 + 2A_2 + A_1$	[1]
1667	$A_7 + A_3 + A_2 + 3A_1$	[1] , [2]
1668	$A_7 + A_3 + 5A_1$	[2]
1669	$A_7 + 4A_2$	[1]
1670	$A_7 + 3A_2 + 2A_1$	[1]
1671	$A_7 + 2A_2 + 4A_1$	[1] , [2]
1672	$A_7 + A_2 + 6A_1$	[2]
1673	$A_7 + 8A_1$	[2, 2]
1674	$2A_6 + A_3$	[1]
1675	$2A_6 + A_2 + A_1$	[1]
1676	$2A_6 + 3A_1$	[1]
1677	$A_6 + A_5 + A_4$	[1]
1678	$A_6 + A_5 + A_3 + A_1$	[1]
1679	$A_6 + A_5 + 2A_2$	[1]
1680	$A_6 + A_5 + A_2 + 2A_1$	[1]
1681	$A_6 + A_5 + 4A_1$	[1]
1682	$A_6 + 2A_4 + A_1$	[1]
1683	$A_6 + A_4 + A_3 + A_2$	[1]
1684	$A_6 + A_4 + A_3 + 2A_1$	[1]
1685	$A_6 + A_4 + 2A_2 + A_1$	[1]
1686	$A_6 + A_4 + A_2 + 3A_1$	[1]
1687	$A_6 + A_4 + 5A_1$	[1]
1688	$A_6 + 3A_3$	[1]
1689	$A_6 + 2A_3 + A_2 + A_1$	[1]
1690	$A_6 + 2A_3 + 3A_1$	[1]
1691	$A_6 + A_3 + 3A_2$	[1]
1692	$A_6 + A_3 + 2A_2 + 2A_1$	[1]
1693	$A_6 + A_3 + A_2 + 4A_1$	[1]
1694	$A_6 + A_3 + 6A_1$	[2]
1695	$A_6 + 4A_2 + A_1$	[1]
1696	$A_6 + 3A_2 + 3A_1$	[1]
1697	$A_6 + 2A_2 + 5A_1$	[1]
1698	$A_6 + A_2 + 7A_1$	empty
1699	$3A_5$	[1] , [3]
1700	$2A_5 + A_4 + A_1$	[1]
1701	$2A_5 + A_3 + A_2$	[1] , [2]
1702	$2A_5 + A_3 + 2A_1$	[1] , [2]
1703	$2A_5 + 2A_2 + A_1$	[1] , [3]
1704	$2A_5 + A_2 + 3A_1$	[1] , [2]
1705	$2A_5 + 5A_1$	[2]
1706	$A_5 + 2A_4 + A_2$	[1]
1707	$A_5 + 2A_4 + 2A_1$	[1]
1708	$A_5 + A_4 + 2A_3$	[1]
1709	$A_5 + A_4 + A_3 + A_2 + A_1$	[1]
1710	$A_5 + A_4 + A_3 + 3A_1$	[1] , [2]
1711	$A_5 + A_4 + 3A_2$	[1]
1712	$A_5 + A_4 + 2A_2 + 2A_1$	[1]
1713	$A_5 + A_4 + A_2 + 4A_1$	[1]
1714	$A_5 + A_4 + 6A_1$	[2]
1715	$A_5 + 3A_3 + A_1$	[1] , [2]
1716	$A_5 + 2A_3 + 2A_2$	[1]
1717	$A_5 + 2A_3 + A_2 + 2A_1$	[1] , [2]
1718	$A_5 + 2A_3 + 4A_1$	[2]
1719	$A_5 + A_3 + 3A_2 + A_1$	[1]
1720	$A_5 + A_3 + 2A_2 + 3A_1$	[1] , [2]
1721	$A_5 + A_3 + A_2 + 5A_1$	[2]
1722	$A_5 + A_3 + 7A_1$	[2, 2]
1723	$A_5 + 5A_2$	[3]
1724	$A_5 + 4A_2 + 2A_1$	[1] , [3]
1725	$A_5 + 3A_2 + 4A_1$	[1]
1726	$A_5 + 2A_2 + 6A_1$	[2]
1727	$3A_4 + A_3$	[1]
1728	$3A_4 + A_2 + A_1$	[1]
1729	$3A_4 + 3A_1$	[1]
1730	$2A_4 + 2A_3 + A_1$	[1]
1731	$2A_4 + A_3 + 2A_2$	[1]
1732	$2A_4 + A_3 + A_2 + 2A_1$	[1]
1733	$2A_4 + A_3 + 4A_1$	[1]
1734	$2A_4 + 3A_2 + A_1$	[1]
1735	$2A_4 + 2A_2 + 3A_1$	[1]
1736	$2A_4 + A_2 + 5A_1$	[1]
1737	$2A_4 + 7A_1$	empty
1738	$A_4 + 3A_3 + A_2$	[1]
1739	$A_4 + 3A_3 + 2A_1$	[1] , [2]
1740	$A_4 + 2A_3 + 2A_2 + A_1$	[1]
1741	$A_4 + 2A_3 + A_2 + 3A_1$	[1]
1742	$A_4 + 2A_3 + 5A_1$	[2]
1743	$A_4 + A_3 + 4A_2$	[1]
1744	$A_4 + A_3 + 3A_2 + 2A_1$	[1]
1745	$A_4 + A_3 + 2A_2 + 4A_1$	[1]
1746	$A_4 + A_3 + A_2 + 6A_1$	[2]
1747	$A_4 + 5A_2 + A_1$	[1]
1748	$A_4 + 4A_2 + 3A_1$	[1]
1749	$A_4 + 3A_2 + 5A_1$	[1]
1750	$5A_3$	[4]
1751	$4A_3 + A_2 + A_1$	[1] , [2]
1752	$4A_3 + 3A_1$	[2] , [4]
1753	$3A_3 + 3A_2$	[1]
1754	$3A_3 + 2A_2 + 2A_1$	[1] , [2]
1755	$3A_3 + A_2 + 4A_1$	[2]
1756	$3A_3 + 6A_1$	[2, 2]
1757	$2A_3 + 4A_2 + A_1$	[1]
1758	$2A_3 + 3A_2 + 3A_1$	[1]
1759	$2A_3 + 2A_2 + 5A_1$	[2]
1760	$A_3 + 6A_2$	[3]
1761	$A_3 + 5A_2 + 2A_1$	[1]
1762	$A_3 + 4A_2 + 4A_1$	[1]
1763	$7A_2 + A_1$	[3]
1764	$6A_2 + 3A_1$	[3]

rank 16

1765	$2E_8$	[1]
1766	$E_8 + E_7 + A_1$	[1]
1767	$E_8 + E_6 + A_2$	[1]
1768	$E_8 + E_6 + 2A_1$	[1]

1769	$E_8 + D_8$	[1]
1770	$E_8 + D_7 + A_1$	[1]
1771	$E_8 + D_6 + A_2$	[1]
1772	$E_8 + D_6 + 2A_1$	[1]
1773	$E_8 + D_5 + A_3$	[1]
1774	$E_8 + D_5 + A_2 + A_1$	[1]
1775	$E_8 + D_5 + 3A_1$	[1]
1776	$E_8 + 2D_4$	[1]
1777	$E_8 + D_4 + A_4$	[1]
1778	$E_8 + D_4 + A_3 + A_1$	[1]
1779	$E_8 + D_4 + 2A_2$	[1]
1780	$E_8 + D_4 + A_2 + 2A_1$	[1]
1781	$E_8 + D_4 + 4A_1$	empty
1782	$E_8 + A_8$	[1]
1783	$E_8 + A_7 + A_1$	[1]
1784	$E_8 + A_6 + A_2$	[1]
1785	$E_8 + A_6 + 2A_1$	[1]
1786	$E_8 + A_5 + A_3$	[1]
1787	$E_8 + A_5 + A_2 + A_1$	[1]
1788	$E_8 + A_5 + 3A_1$	[1]
1789	$E_8 + 2A_4$	[1]
1790	$E_8 + A_4 + A_3 + A_1$	[1]
1791	$E_8 + A_4 + 2A_2$	[1]
1792	$E_8 + A_4 + A_2 + 2A_1$	[1]
1793	$E_8 + A_4 + 4A_1$	[1]
1794	$E_8 + 2A_3 + A_2$	[1]
1795	$E_8 + 2A_3 + 2A_1$	[1]
1796	$E_8 + A_3 + 2A_2 + A_1$	[1]
1797	$E_8 + A_3 + A_2 + 3A_1$	[1]
1798	$E_8 + A_3 + 5A_1$	empty
1799	$E_8 + 4A_2$	[1]
1800	$E_8 + 3A_2 + 2A_1$	[1]
1801	$E_8 + 2A_2 + 4A_1$	[1]
1802	$2E_7 + A_2$	[1]
1803	$2E_7 + 2A_1$	[1] , [2]
1804	$E_7 + E_6 + A_3$	[1]
1805	$E_7 + E_6 + A_2 + A_1$	[1]
1806	$E_7 + E_6 + 3A_1$	[1]
1807	$E_7 + D_9$	[1]
1808	$E_7 + D_8 + A_1$	[1] , [2]
1809	$E_7 + D_7 + A_2$	[1]
1810	$E_7 + D_7 + 2A_1$	[1]
1811	$E_7 + D_6 + A_3$	[1] , [2]
1812	$E_7 + D_6 + A_2 + A_1$	[1]
1813	$E_7 + D_6 + 3A_1$	[2]
1814	$E_7 + D_5 + D_4$	[1]
1815	$E_7 + D_5 + A_4$	[1]
1816	$E_7 + D_5 + A_3 + A_1$	[1] , [2]
1817	$E_7 + D_5 + 2A_2$	[1]
1818	$E_7 + D_5 + A_2 + 2A_1$	[1]
1819	$E_7 + D_5 + 4A_1$	[2]
1820	$E_7 + 2D_4 + A_1$	[2]
1821	$E_7 + D_4 + A_5$	[1] , [2]
1822	$E_7 + D_4 + A_4 + A_1$	[1]
1823	$E_7 + D_4 + A_3 + A_2$	[1]
1824	$E_7 + D_4 + A_3 + 2A_1$	[2]
1825	$E_7 + D_4 + 2A_2 + A_1$	[1]
1826	$E_7 + D_4 + A_2 + 3A_1$	[2]
1827	$E_7 + A_9$	[1] , [2]
1828	$E_7 + A_8 + A_1$	[1]
1829	$E_7 + A_7 + A_2$	[1]
1830	$E_7 + A_7 + 2A_1$	[1] , [2]
1831	$E_7 + A_6 + A_3$	[1]
1832	$E_7 + A_6 + A_2 + A_1$	[1]
1833	$E_7 + A_6 + 3A_1$	[1]
1834	$E_7 + A_5 + A_4$	[1]
1835	$E_7 + A_5 + A_3 + A_1$	[1] , [2]
1836	$E_7 + A_5 + 2A_2$	[1]
1837	$E_7 + A_5 + A_2 + 2A_1$	[1] , [2]
1838	$E_7 + A_5 + 4A_1$	[2]
1839	$E_7 + 2A_4 + A_1$	[1]
1840	$E_7 + A_4 + A_3 + A_2$	[1]
1841	$E_7 + A_4 + A_3 + 2A_1$	[1]
1842	$E_7 + A_4 + 2A_2 + A_1$	[1]
1843	$E_7 + A_4 + A_2 + 3A_1$	[1]
1844	$E_7 + A_4 + 5A_1$	[2]
1845	$E_7 + 3A_3$	[1]
1846	$E_7 + 2A_3 + A_2 + A_1$	[1] , [2]
1847	$E_7 + 2A_3 + 3A_1$	[2]
1848	$E_7 + A_3 + 3A_2$	[1]
1849	$E_7 + A_3 + 2A_2 + 2A_1$	[1]
1850	$E_7 + A_3 + A_2 + 4A_1$	[2]
1851	$E_7 + 4A_2 + A_1$	[1]
1852	$E_7 + 3A_2 + 3A_1$	[1]
1853	$2E_6 + D_4$	[1]
1854	$2E_6 + A_4$	[1]
1855	$2E_6 + A_3 + A_1$	[1]
1856	$2E_6 + 2A_2$	[1] , [3]
1857	$2E_6 + A_2 + 2A_1$	[1]
1858	$2E_6 + 4A_1$	[1]
1859	$E_6 + D_{10}$	[1]
1860	$E_6 + D_9 + A_1$	[1]
1861	$E_6 + D_8 + A_2$	[1]
1862	$E_6 + D_8 + 2A_1$	[1]
1863	$E_6 + D_7 + A_3$	[1]
1864	$E_6 + D_7 + A_2 + A_1$	[1]
1865	$E_6 + D_7 + 3A_1$	[1]
1866	$E_6 + D_6 + D_4$	[1]
1867	$E_6 + D_6 + A_4$	[1]
1868	$E_6 + D_6 + A_3 + A_1$	[1]
1869	$E_6 + D_6 + 2A_2$	[1]
1870	$E_6 + D_6 + A_2 + 2A_1$	[1]
1871	$E_6 + D_6 + 4A_1$	empty
1872	$E_6 + 2D_5$	[1]
1873	$E_6 + D_5 + D_4 + A_1$	[1]
1874	$E_6 + D_5 + A_5$	[1]
1875	$E_6 + D_5 + A_4 + A_1$	[1]
1876	$E_6 + D_5 + A_3 + A_2$	[1]
1877	$E_6 + D_5 + A_3 + 2A_1$	[1]
1878	$E_6 + D_5 + 2A_2 + A_1$	[1]
1879	$E_6 + D_5 + A_2 + 3A_1$	[1]
1880	$E_6 + 2D_4 + A_2$	[1]
1881	$E_6 + 2D_4 + 2A_1$	empty
1882	$E_6 + D_4 + A_6$	[1]
1883	$E_6 + D_4 + A_5 + A_1$	[1]
1884	$E_6 + D_4 + A_4 + A_2$	[1]
1885	$E_6 + D_4 + A_4 + 2A_1$	[1]
1886	$E_6 + D_4 + 2A_3$	[1]
1887	$E_6 + D_4 + A_3 + A_2 + A_1$	[1]
1888	$E_6 + D_4 + A_3 + 3A_1$	empty

Table 1 (rank 16)

1889	$E_6 + D_4 + 3A_2$	empty
1890	$E_6 + D_4 + 2A_2 + 2A_1$	[1]
1891	$E_6 + A_{10}$	[1]
1892	$E_6 + A_9 + A_1$	[1]
1893	$E_6 + A_8 + A_2$	[1] , [3]
1894	$E_6 + A_8 + 2A_1$	[1]
1895	$E_6 + A_7 + A_3$	[1]
1896	$E_6 + A_7 + A_2 + A_1$	[1]
1897	$E_6 + A_7 + 3A_1$	[1]
1898	$E_6 + A_6 + A_4$	[1]
1899	$E_6 + A_6 + A_3 + A_1$	[1]
1900	$E_6 + A_6 + 2A_2$	[1]
1901	$E_6 + A_6 + A_2 + 2A_1$	[1]
1902	$E_6 + A_6 + 4A_1$	[1]
1903	$E_6 + 2A_5$	[1] , [3]
1904	$E_6 + A_5 + A_4 + A_1$	[1]
1905	$E_6 + A_5 + A_3 + A_2$	[1]
1906	$E_6 + A_5 + A_3 + 2A_1$	[1]
1907	$E_6 + A_5 + 2A_2 + A_1$	[1] , [3]
1908	$E_6 + A_5 + A_2 + 3A_1$	[1]
1909	$E_6 + A_5 + 5A_1$	empty
1910	$E_6 + 2A_4 + A_2$	[1]
1911	$E_6 + 2A_4 + 2A_1$	[1]
1912	$E_6 + A_4 + 2A_3$	[1]
1913	$E_6 + A_4 + A_3 + A_2 + A_1$	[1]
1914	$E_6 + A_4 + A_3 + 3A_1$	[1]
1915	$E_6 + A_4 + 3A_2$	[1]
1916	$E_6 + A_4 + 2A_2 + 2A_1$	[1]
1917	$E_6 + A_4 + A_2 + 4A_1$	[1]
1918	$E_6 + 3A_3 + A_1$	[1]
1919	$E_6 + 2A_3 + 2A_2$	[1]
1920	$E_6 + 2A_3 + A_2 + 2A_1$	[1]
1921	$E_6 + 2A_3 + 4A_1$	empty
1922	$E_6 + A_3 + 3A_2 + A_1$	[1]
1923	$E_6 + A_3 + 2A_2 + 3A_1$	[1]
1924	$E_6 + 5A_2$	[3]
1925	$E_6 + 4A_2 + 2A_1$	[3]
1926	D_{16}	[1] , [2]
1927	$D_{15} + A_1$	[1]
1928	$D_{14} + A_2$	[1]
1929	$D_{14} + 2A_1$	[1] , [2]
1930	$D_{13} + A_3$	[1]
1931	$D_{13} + A_2 + A_1$	[1]
1932	$D_{13} + 3A_1$	[1]
1933	$D_{12} + D_4$	[1] , [2]
1934	$D_{12} + A_4$	[1]
1935	$D_{12} + A_3 + A_1$	[1] , [2]
1936	$D_{12} + 2A_2$	[1]
1937	$D_{12} + A_2 + 2A_1$	[1] , [2]
1938	$D_{12} + 4A_1$	[2]
1939	$D_{11} + D_5$	[1]
1940	$D_{11} + D_4 + A_1$	[1]
1941	$D_{11} + A_5$	[1]
1942	$D_{11} + A_4 + A_1$	[1]
1943	$D_{11} + A_3 + A_2$	[1]
1944	$D_{11} + A_3 + 2A_1$	[1]
1945	$D_{11} + 2A_2 + A_1$	[1]
1946	$D_{11} + A_2 + 3A_1$	[1]
1947	$D_{11} + 5A_1$	empty
1948	$D_{10} + D_6$	[1] , [2]
1949	$D_{10} + D_5 + A_1$	[1] , [2]
1950	$D_{10} + D_4 + A_2$	[1]
1951	$D_{10} + D_4 + 2A_1$	[2]
1952	$D_{10} + A_6$	[1]
1953	$D_{10} + A_5 + A_1$	[1] , [2]
1954	$D_{10} + A_4 + A_2$	[1]
1955	$D_{10} + A_4 + 2A_1$	[1]
1956	$D_{10} + 2A_3$	[1]
1957	$D_{10} + A_3 + A_2 + A_1$	[1] , [2]
1958	$D_{10} + A_3 + 3A_1$	[2]
1959	$D_{10} + 3A_2$	[1]
1960	$D_{10} + 2A_2 + 2A_1$	[1]
1961	$D_{10} + A_2 + 4A_1$	[2]
1962	$D_{10} + 6A_1$	[2, 2]
1963	$D_9 + D_7$	[1]
1964	$D_9 + D_6 + A_1$	[1]
1965	$D_9 + D_5 + A_2$	[1]
1966	$D_9 + D_5 + 2A_1$	[1]
1967	$D_9 + D_4 + A_3$	[1]
1968	$D_9 + D_4 + A_2 + A_1$	[1]
1969	$D_9 + D_4 + 3A_1$	empty
1970	$D_9 + A_7$	[1]
1971	$D_9 + A_6 + A_1$	[1]
1972	$D_9 + A_5 + A_2$	[1]
1973	$D_9 + A_5 + 2A_1$	[1]
1974	$D_9 + A_4 + A_3$	[1]
1975	$D_9 + A_4 + A_2 + A_1$	[1]
1976	$D_9 + A_4 + 3A_1$	[1]
1977	$D_9 + 2A_3 + A_1$	[1]
1978	$D_9 + A_3 + 2A_2$	[1]
1979	$D_9 + A_3 + A_2 + 2A_1$	[1]
1980	$D_9 + A_3 + 4A_1$	[2]
1981	$D_9 + 3A_2 + A_1$	[1]
1982	$D_9 + 2A_2 + 3A_1$	[1]
1983	$D_9 + A_2 + 5A_1$	empty
1984	$2D_8$	[1] , [2]
1985	$D_8 + D_7 + A_1$	[1]
1986	$D_8 + D_6 + A_2$	[1]
1987	$D_8 + D_6 + 2A_1$	[2]
1988	$D_8 + D_5 + A_3$	[1] , [2]
1989	$D_8 + D_5 + A_2 + A_1$	[1]
1990	$D_8 + D_5 + 3A_1$	[2]
1991	$D_8 + 2D_4$	[2]
1992	$D_8 + D_4 + A_4$	[1]
1993	$D_8 + D_4 + A_3 + A_1$	[2]
1994	$D_8 + D_4 + 2A_2$	empty
1995	$D_8 + D_4 + A_2 + 2A_1$	[2]
1996	$D_8 + D_4 + 4A_1$	[2, 2]
1997	$D_8 + A_8$	[1]
1998	$D_8 + A_7 + A_1$	[1] , [2]
1999	$D_8 + A_6 + A_2$	[1]
2000	$D_8 + A_6 + 2A_1$	[1]
2001	$D_8 + A_5 + A_3$	[1]
2002	$D_8 + A_5 + A_2 + A_1$	[1] , [2]
2003	$D_8 + A_5 + 3A_1$	[2]
2004	$D_8 + 2A_4$	[1]
2005	$D_8 + A_4 + A_3 + A_1$	[1]
2006	$D_8 + A_4 + 2A_2$	[1]
2007	$D_8 + A_4 + A_2 + 2A_1$	[1]
2008	$D_8 + A_4 + 4A_1$	[2]

Table 1 (rank 16)

2009	$D_8 + 2A_3 + A_2$	[2]
2010	$D_8 + 2A_3 + 2A_1$	[2]
2011	$D_8 + A_3 + 2A_2 + A_1$	[1]
2012	$D_8 + A_3 + A_2 + 3A_1$	[2]
2013	$D_8 + A_3 + 5A_1$	[2, 2]
2014	$D_8 + 4A_2$	[1]
2015	$D_8 + 3A_2 + 2A_1$	[1]
2016	$D_8 + 2A_2 + 4A_1$	[2]
2017	$2D_7 + A_2$	[1]
2018	$2D_7 + 2A_1$	[1]
2019	$D_7 + D_6 + A_3$	[1]
2020	$D_7 + D_6 + A_2 + A_1$	[1]
2021	$D_7 + D_6 + 3A_1$	[2]
2022	$D_7 + D_5 + D_4$	[1]
2023	$D_7 + D_5 + A_4$	[1]
2024	$D_7 + D_5 + A_3 + A_1$	[1]
2025	$D_7 + D_5 + 2A_2$	[1]
2026	$D_7 + D_5 + A_2 + 2A_1$	[1]
2027	$D_7 + D_5 + 4A_1$	[2]
2028	$D_7 + 2D_4 + A_1$	empty
2029	$D_7 + D_4 + A_5$	[1]
2030	$D_7 + D_4 + A_4 + A_1$	[1]
2031	$D_7 + D_4 + A_3 + A_2$	empty
2032	$D_7 + D_4 + A_3 + 2A_1$	[2]
2033	$D_7 + D_4 + 2A_2 + A_1$	[1]
2034	$D_7 + D_4 + A_2 + 3A_1$	empty
2035	$D_7 + A_9$	[1]
2036	$D_7 + A_8 + A_1$	[1]
2037	$D_7 + A_7 + A_2$	[1]
2038	$D_7 + A_7 + 2A_1$	[1] , [2]
2039	$D_7 + A_6 + A_3$	[1]
2040	$D_7 + A_6 + A_2 + A_1$	[1]
2041	$D_7 + A_6 + 3A_1$	[1]
2042	$D_7 + A_5 + A_4$	[1]
2043	$D_7 + A_5 + A_3 + A_1$	[1] , [2]
2044	$D_7 + A_5 + 2A_2$	[1]
2045	$D_7 + A_5 + A_2 + 2A_1$	[1]
2046	$D_7 + A_5 + 4A_1$	[2]
2047	$D_7 + 2A_4 + A_1$	[1]
2048	$D_7 + A_4 + A_3 + A_2$	[1]
2049	$D_7 + A_4 + A_3 + 2A_1$	[1]
2050	$D_7 + A_4 + 2A_2 + A_1$	[1]
2051	$D_7 + A_4 + A_2 + 3A_1$	[1]
2052	$D_7 + A_4 + 5A_1$	empty
2053	$D_7 + 3A_3$	[4]
2054	$D_7 + 2A_3 + A_2 + A_1$	[1]
2055	$D_7 + 2A_3 + 3A_1$	[2]
2056	$D_7 + A_3 + 3A_2$	[1]
2057	$D_7 + A_3 + 2A_2 + 2A_1$	[1]
2058	$D_7 + A_3 + A_2 + 4A_1$	[2]
2059	$D_7 + 4A_2 + A_1$	empty
2060	$D_7 + 3A_2 + 3A_1$	[1]
2061	$2D_6 + D_4$	[2]
2062	$2D_6 + A_4$	[1]
2063	$2D_6 + A_3 + A_1$	[2]
2064	$2D_6 + 2A_2$	[1]
2065	$2D_6 + A_2 + 2A_1$	[2]
2066	$2D_6 + 4A_1$	[2, 2]
2067	$D_6 + 2D_5$	[1]
2068	$D_6 + D_5 + D_4 + A_1$	[2]
2069	$D_6 + D_5 + A_5$	[1] , [2]
2070	$D_6 + D_5 + A_4 + A_1$	[1]
2071	$D_6 + D_5 + A_3 + A_2$	[1]
2072	$D_6 + D_5 + A_3 + 2A_1$	[2]
2073	$D_6 + D_5 + 2A_2 + A_1$	[1]
2074	$D_6 + D_5 + A_2 + 3A_1$	[2]
2075	$D_6 + 2D_4 + A_2$	empty
2076	$D_6 + 2D_4 + 2A_1$	[2, 2]
2077	$D_6 + D_4 + A_6$	[1]
2078	$D_6 + D_4 + A_5 + A_1$	[2]
2079	$D_6 + D_4 + A_4 + A_2$	[1]
2080	$D_6 + D_4 + A_4 + 2A_1$	empty
2081	$D_6 + D_4 + 2A_3$	[2]
2082	$D_6 + D_4 + A_3 + A_2 + A_1$	[2]
2083	$D_6 + D_4 + A_3 + 3A_1$	[2, 2]
2084	$D_6 + D_4 + 3A_2$	[1]
2085	$D_6 + D_4 + 2A_2 + 2A_1$	empty
2086	$D_6 + A_{10}$	[1]
2087	$D_6 + A_9 + A_1$	[1] , [2]
2088	$D_6 + A_8 + A_2$	[1]
2089	$D_6 + A_8 + 2A_1$	[1]
2090	$D_6 + A_7 + A_3$	[1] , [2]
2091	$D_6 + A_7 + A_2 + A_1$	[1] , [2]
2092	$D_6 + A_7 + 3A_1$	[2]
2093	$D_6 + A_6 + A_4$	[1]
2094	$D_6 + A_6 + A_3 + A_1$	[1]
2095	$D_6 + A_6 + 2A_2$	[1]
2096	$D_6 + A_6 + A_2 + 2A_1$	[1]
2097	$D_6 + A_6 + 4A_1$	empty
2098	$D_6 + 2A_5$	[1] , [2]
2099	$D_6 + A_5 + A_4 + A_1$	[1]
2100	$D_6 + A_5 + A_3 + A_2$	[1] , [2]
2101	$D_6 + A_5 + A_3 + 2A_1$	[2]
2102	$D_6 + A_5 + 2A_2 + A_1$	[1]
2103	$D_6 + A_5 + A_2 + 3A_1$	[2]
2104	$D_6 + A_5 + 5A_1$	[2, 2]
2105	$D_6 + 2A_4 + A_2$	[1]
2106	$D_6 + 2A_4 + 2A_1$	[1]
2107	$D_6 + A_4 + 2A_3$	[1]
2108	$D_6 + A_4 + A_3 + A_2 + A_1$	[1]
2109	$D_6 + A_4 + A_3 + 3A_1$	[2]
2110	$D_6 + A_4 + 3A_2$	[1]
2111	$D_6 + A_4 + 2A_2 + 2A_1$	[1]
2112	$D_6 + A_4 + A_2 + 4A_1$	empty
2113	$D_6 + 3A_3 + A_1$	[2]
2114	$D_6 + 2A_3 + 2A_2$	[1]
2115	$D_6 + 2A_3 + A_2 + 2A_1$	[2]
2116	$D_6 + 2A_3 + 4A_1$	[2, 2]
2117	$D_6 + A_3 + 3A_2 + A_1$	[1]
2118	$D_6 + A_3 + 2A_2 + 3A_1$	[2]
2119	$D_6 + 5A_2$	empty
2120	$D_6 + 4A_2 + 2A_1$	[1]
2121	$3D_5 + A_1$	[1]
2122	$2D_5 + D_4 + A_2$	[1]
2123	$2D_5 + D_4 + 2A_1$	[2]
2124	$2D_5 + A_6$	[1]
2125	$2D_5 + A_5 + A_1$	[1] , [2]
2126	$2D_5 + A_4 + A_2$	[1]
2127	$2D_5 + A_4 + 2A_1$	[1]
2128	$2D_5 + 2A_3$	[1] , [2] , [4]

Table 1 (rank 16)

2129	$2\,D_5 + A_3 + A_2 + A_1$	[1]
2130	$2\,D_5 + A_3 + 3\,A_1$	[2]
2131	$2\,D_5 + 3\,A_2$	[1]
2132	$2\,D_5 + 2\,A_2 + 2\,A_1$	[1]
2133	$D_5 + 2\,D_4 + A_3$	[2]
2134	$D_5 + 2\,D_4 + A_2 + A_1$	empty
2135	$D_5 + D_4 + A_7$	[1] , [2]
2136	$D_5 + D_4 + A_6 + A_1$	[1]
2137	$D_5 + D_4 + A_5 + A_2$	[1]
2138	$D_5 + D_4 + A_5 + 2\,A_1$	[2]
2139	$D_5 + D_4 + A_4 + A_3$	[1]
2140	$D_5 + D_4 + A_4 + A_2 + A_1$	[1]
2141	$D_5 + D_4 + A_4 + 3\,A_1$	empty
2142	$D_5 + D_4 + 2\,A_3 + A_1$	[2]
2143	$D_5 + D_4 + A_3 + 2\,A_2$	empty
2144	$D_5 + D_4 + A_3 + A_2 + 2\,A_1$	[2]
2145	$D_5 + D_4 + 3\,A_2 + A_1$	[1]
2146	$D_5 + A_{11}$	[1] , [2]
2147	$D_5 + A_{10} + A_1$	[1]
2148	$D_5 + A_9 + A_2$	[1]
2149	$D_5 + A_9 + 2\,A_1$	[1] , [2]
2150	$D_5 + A_8 + A_3$	[1]
2151	$D_5 + A_8 + A_2 + A_1$	[1]
2152	$D_5 + A_8 + 3\,A_1$	[1]
2153	$D_5 + A_7 + A_4$	[1]
2154	$D_5 + A_7 + A_3 + A_1$	[1] , [2] , [4]
2155	$D_5 + A_7 + 2\,A_2$	[1]
2156	$D_5 + A_7 + A_2 + 2\,A_1$	[1] , [2]
2157	$D_5 + A_7 + 4\,A_1$	[2]
2158	$D_5 + A_6 + A_5$	[1]
2159	$D_5 + A_6 + A_4 + A_1$	[1]
2160	$D_5 + A_6 + A_3 + A_2$	[1]
2161	$D_5 + A_6 + A_3 + 2\,A_1$	[1]
2162	$D_5 + A_6 + 2\,A_2 + A_1$	[1]
2163	$D_5 + A_6 + A_2 + 3\,A_1$	[1]
2164	$D_5 + A_6 + 5\,A_1$	empty
2165	$D_5 + 2\,A_5 + A_1$	[1] , [2]
2166	$D_5 + A_5 + A_4 + A_2$	[1]
2167	$D_5 + A_5 + A_4 + 2\,A_1$	[1]
2168	$D_5 + A_5 + 2\,A_3$	[1]
2169	$D_5 + A_5 + A_3 + A_2 + A_1$	[1] , [2]
2170	$D_5 + A_5 + A_3 + 3\,A_1$	[2]
2171	$D_5 + A_5 + 3\,A_2$	[1]
2172	$D_5 + A_5 + 2\,A_2 + 2\,A_1$	[1]
2173	$D_5 + A_5 + A_2 + 4\,A_1$	[2]
2174	$D_5 + 2\,A_4 + A_3$	[1]
2175	$D_5 + 2\,A_4 + A_2 + A_1$	[1]
2176	$D_5 + 2\,A_4 + 3\,A_1$	[1]
2177	$D_5 + A_4 + 2\,A_3 + A_1$	[1]
2178	$D_5 + A_4 + A_3 + 2\,A_2$	[1]
2179	$D_5 + A_4 + A_3 + A_2 + 2\,A_1$	[1]
2180	$D_5 + A_4 + A_3 + 4\,A_1$	[2]
2181	$D_5 + A_4 + 3\,A_2 + A_1$	[1]
2182	$D_5 + A_4 + 2\,A_2 + 3\,A_1$	[1]
2183	$D_5 + 3\,A_3 + A_2$	[2]
2184	$D_5 + 3\,A_3 + 2\,A_1$	[2] , [4]
2185	$D_5 + 2\,A_3 + 2\,A_2 + A_1$	[1]
2186	$D_5 + 2\,A_3 + A_2 + 3\,A_1$	[2]
2187	$D_5 + A_3 + 4\,A_2$	[1]
2188	$D_5 + A_3 + 3\,A_2 + 2\,A_1$	[1]
2189	$D_5 + 5\,A_2 + A_1$	empty
2190	$4\,D_4$	[2, 2]
2191	$3\,D_4 + A_4$	empty
2192	$3\,D_4 + A_3 + A_1$	empty
2193	$3\,D_4 + 2\,A_2$	empty
2194	$2\,D_4 + A_8$	[1]
2195	$2\,D_4 + A_7 + A_1$	[2]
2196	$2\,D_4 + A_6 + A_2$	empty
2197	$2\,D_4 + A_6 + 2\,A_1$	empty
2198	$2\,D_4 + A_5 + A_3$	empty
2199	$2\,D_4 + A_5 + A_2 + A_1$	[2]
2200	$2\,D_4 + A_5 + 3\,A_1$	empty
2201	$2\,D_4 + 2\,A_4$	[1]
2202	$2\,D_4 + A_4 + A_3 + A_1$	empty
2203	$2\,D_4 + A_4 + 2\,A_2$	empty
2204	$2\,D_4 + A_4 + A_2 + 2\,A_1$	empty
2205	$2\,D_4 + 2\,A_3 + A_2$	empty
2206	$2\,D_4 + 2\,A_3 + 2\,A_1$	[2, 2]
2207	$2\,D_4 + A_3 + 2\,A_2 + A_1$	empty
2208	$2\,D_4 + 4\,A_2$	[1]
2209	$D_4 + A_{12}$	[1]
2210	$D_4 + A_{11} + A_1$	[1] , [2]
2211	$D_4 + A_{10} + A_2$	[1]
2212	$D_4 + A_{10} + 2\,A_1$	[1]
2213	$D_4 + A_9 + A_3$	[1]
2214	$D_4 + A_9 + A_2 + A_1$	[1] , [2]
2215	$D_4 + A_9 + 3\,A_1$	[2]
2216	$D_4 + A_8 + A_4$	[1]
2217	$D_4 + A_8 + A_3 + A_1$	[1]
2218	$D_4 + A_8 + 2\,A_2$	[1]
2219	$D_4 + A_8 + A_2 + 2\,A_1$	[1]
2220	$D_4 + A_8 + 4\,A_1$	empty
2221	$D_4 + A_7 + A_5$	[1]
2222	$D_4 + A_7 + A_4 + A_1$	[1]
2223	$D_4 + A_7 + A_3 + A_2$	[2]
2224	$D_4 + A_7 + A_3 + 2\,A_1$	[2]
2225	$D_4 + A_7 + 2\,A_2 + A_1$	[1]
2226	$D_4 + A_7 + A_2 + 3\,A_1$	[2]
2227	$D_4 + A_7 + 5\,A_1$	empty
2228	$D_4 + 2\,A_6$	[1]
2229	$D_4 + A_6 + A_5 + A_1$	[1]
2230	$D_4 + A_6 + A_4 + A_2$	[1]
2231	$D_4 + A_6 + A_4 + 2\,A_1$	[1]
2232	$D_4 + A_6 + 2\,A_3$	empty
2233	$D_4 + A_6 + A_3 + A_2 + A_1$	[1]
2234	$D_4 + A_6 + A_3 + 3\,A_1$	empty
2235	$D_4 + A_6 + 3\,A_2$	[1]
2236	$D_4 + A_6 + 2\,A_2 + 2\,A_1$	[1]
2237	$D_4 + A_6 + A_2 + 4\,A_1$	empty
2238	$D_4 + 2\,A_5 + A_2$	[1] , [2]
2239	$D_4 + 2\,A_5 + 2\,A_1$	[2]
2240	$D_4 + A_5 + A_4 + A_3$	[1]
2241	$D_4 + A_5 + A_4 + A_2 + A_1$	[1]
2242	$D_4 + A_5 + A_4 + 3\,A_1$	[2]
2243	$D_4 + A_5 + 2\,A_3 + A_1$	[2]
2244	$D_4 + A_5 + A_3 + 2\,A_2$	[1]
2245	$D_4 + A_5 + A_3 + A_2 + 2\,A_1$	[2]
2246	$D_4 + A_5 + A_3 + 4\,A_1$	[2, 2]
2247	$D_4 + A_5 + 3\,A_2 + A_1$	empty
2248	$D_4 + A_5 + 2\,A_2 + 3\,A_1$	[2]

Table 1 (rank 16)

2249	$D_4 + 3A_4$	[1]
2250	$D_4 + 2A_4 + A_3 + A_1$	[1]
2251	$D_4 + 2A_4 + 2A_2$	[1]
2252	$D_4 + 2A_4 + A_2 + 2A_1$	[1]
2253	$D_4 + 2A_4 + 4A_1$	empty
2254	$D_4 + A_4 + 2A_3 + A_2$	empty
2255	$D_4 + A_4 + 2A_3 + 2A_1$	[2]
2256	$D_4 + A_4 + A_3 + 2A_2 + A_1$	[1]
2257	$D_4 + A_4 + A_3 + A_2 + 3A_1$	empty
2258	$D_4 + A_4 + 4A_2$	empty
2259	$D_4 + A_4 + 3A_2 + 2A_1$	[1]
2260	$D_4 + 4A_3$	empty
2261	$D_4 + 3A_3 + A_2 + A_1$	[2]
2262	$D_4 + 3A_3 + 3A_1$	[2, 2]
2263	$D_4 + 2A_3 + 3A_2$	[1]
2264	$D_4 + 2A_3 + 2A_2 + 2A_1$	[2]
2265	$D_4 + A_3 + 4A_2 + A_1$	empty
2266	$D_4 + 6A_2$	empty
2267	A_{16}	[1]
2268	$A_{15} + A_1$	[1] , [2]
2269	$A_{14} + A_2$	[1] , [3]
2270	$A_{14} + 2A_1$	[1]
2271	$A_{13} + A_3$	[1]
2272	$A_{13} + A_2 + A_1$	[1] , [2]
2273	$A_{13} + 3A_1$	[1] , [2]
2274	$A_{12} + A_4$	[1]
2275	$A_{12} + A_3 + A_1$	[1]
2276	$A_{12} + 2A_2$	[1]
2277	$A_{12} + A_2 + 2A_1$	[1]
2278	$A_{12} + 4A_1$	[1]
2279	$A_{11} + A_5$	[1] , [3]
2280	$A_{11} + A_4 + A_1$	[1]
2281	$A_{11} + A_3 + A_2$	[1] , [2]
2282	$A_{11} + A_3 + 2A_1$	[1] , [2] , [4]
2283	$A_{11} + 2A_2 + A_1$	[1] , [3]
2284	$A_{11} + A_2 + 3A_1$	[1] , [2]
2285	$A_{11} + 5A_1$	[2]
2286	$A_{10} + A_6$	[1]
2287	$A_{10} + A_5 + A_1$	[1]
2288	$A_{10} + A_4 + A_2$	[1]
2289	$A_{10} + A_4 + 2A_1$	[1]
2290	$A_{10} + 2A_3$	[1]
2291	$A_{10} + A_3 + A_2 + A_1$	[1]
2292	$A_{10} + A_3 + 3A_1$	[1]
2293	$A_{10} + 3A_2$	[1]
2294	$A_{10} + 2A_2 + 2A_1$	[1]
2295	$A_{10} + A_2 + 4A_1$	[1]
2296	$A_{10} + 6A_1$	empty
2297	$A_9 + A_7$	[1]
2298	$A_9 + A_6 + A_1$	[1]
2299	$A_9 + A_5 + A_2$	[1] , [2]
2300	$A_9 + A_5 + 2A_1$	[1] , [2]
2301	$A_9 + A_4 + A_3$	[1]
2302	$A_9 + A_4 + A_2 + A_1$	[1]
2303	$A_9 + A_4 + 3A_1$	[1] , [2]
2304	$A_9 + 2A_3 + A_1$	[1] , [2]
2305	$A_9 + A_3 + 2A_2$	[1]
2306	$A_9 + A_3 + A_2 + 2A_1$	[1] , [2]
2307	$A_9 + A_3 + 4A_1$	[2]
2308	$A_9 + 3A_2 + A_1$	[1]
2309	$A_9 + 2A_2 + 3A_1$	[1] , [2]
2310	$A_9 + A_2 + 5A_1$	[2]
2311	$A_9 + 7A_1$	empty
2312	$2A_8$	[1] , [3]
2313	$A_8 + A_7 + A_1$	[1]
2314	$A_8 + A_6 + A_2$	[1]
2315	$A_8 + A_6 + 2A_1$	[1]
2316	$A_8 + A_5 + A_3$	[1]
2317	$A_8 + A_5 + A_2 + A_1$	[1] , [3]
2318	$A_8 + A_5 + 3A_1$	[1]
2319	$A_8 + 2A_4$	[1]
2320	$A_8 + A_4 + A_3 + A_1$	[1]
2321	$A_8 + A_4 + 2A_2$	[1]
2322	$A_8 + A_4 + A_2 + 2A_1$	[1]
2323	$A_8 + A_4 + 4A_1$	[1]
2324	$A_8 + 2A_3 + A_2$	[1]
2325	$A_8 + 2A_3 + 2A_1$	[1]
2326	$A_8 + A_3 + 2A_2 + A_1$	[1]
2327	$A_8 + A_3 + A_2 + 3A_1$	[1]
2328	$A_8 + A_3 + 5A_1$	empty
2329	$A_8 + 4A_2$	[3]
2330	$A_8 + 3A_2 + 2A_1$	[1] , [3]
2331	$A_8 + 2A_2 + 4A_1$	[1]
2332	$A_8 + A_2 + 6A_1$	empty
2333	$2A_7 + A_2$	[1] , [2]
2334	$2A_7 + 2A_1$	[1] , [2] , [4]
2335	$A_7 + A_6 + A_3$	[1]
2336	$A_7 + A_6 + A_2 + A_1$	[1]
2337	$A_7 + A_6 + 3A_1$	[1]
2338	$A_7 + A_5 + A_4$	[1]
2339	$A_7 + A_5 + A_3 + A_1$	[1] , [2]
2340	$A_7 + A_5 + 2A_2$	[1]
2341	$A_7 + A_5 + A_2 + 2A_1$	[1] , [2]
2342	$A_7 + A_5 + 4A_1$	[2]
2343	$A_7 + 2A_4 + A_1$	[1]
2344	$A_7 + A_4 + A_3 + A_2$	[1]
2345	$A_7 + A_4 + A_3 + 2A_1$	[1] , [2]
2346	$A_7 + A_4 + 2A_2 + A_1$	[1]
2347	$A_7 + A_4 + A_2 + 3A_1$	[1]
2348	$A_7 + A_4 + 5A_1$	[2]
2349	$A_7 + 3A_3$	[4]
2350	$A_7 + 2A_3 + A_2 + A_1$	[1] , [2]
2351	$A_7 + 2A_3 + 3A_1$	[2] , [4]
2352	$A_7 + A_3 + 3A_2$	[1]
2353	$A_7 + A_3 + 2A_2 + 2A_1$	[1] , [2]
2354	$A_7 + A_3 + A_2 + 4A_1$	[2]
2355	$A_7 + A_3 + 6A_1$	[2, 2]
2356	$A_7 + 4A_2 + A_1$	[1]
2357	$A_7 + 3A_2 + 3A_1$	[1]
2358	$A_7 + 2A_2 + 5A_1$	[2]
2359	$2A_6 + A_4$	[1]
2360	$2A_6 + A_3 + A_1$	[1]
2361	$2A_6 + 2A_2$	[1]
2362	$2A_6 + A_2 + 2A_1$	[1]
2363	$2A_6 + 4A_1$	[1]
2364	$A_6 + 2A_5$	[1]
2365	$A_6 + A_5 + A_4 + A_1$	[1]
2366	$A_6 + A_5 + A_3 + A_2$	[1]
2367	$A_6 + A_5 + A_3 + 2A_1$	[1]
2368	$A_6 + A_5 + 2A_2 + A_1$	[1]

Table 1 (rank 16 - rank 17)

2369	$A_6 + A_5 + A_2 + 3A_1$	[1]
2370	$A_6 + A_5 + 5A_1$	[2]
2371	$A_6 + 2A_4 + A_2$	[1]
2372	$A_6 + 2A_4 + 2A_1$	[1]
2373	$A_6 + A_4 + 2A_3$	[1]
2374	$A_6 + A_4 + A_3 + A_2 + A_1$	[1]
2375	$A_6 + A_4 + A_3 + 3A_1$	[1]
2376	$A_6 + A_4 + 3A_2$	[1]
2377	$A_6 + A_4 + 2A_2 + 2A_1$	[1]
2378	$A_6 + A_4 + A_2 + 4A_1$	[1]
2379	$A_6 + A_4 + 6A_1$	empty
2380	$A_6 + 3A_3 + A_1$	[1]
2381	$A_6 + 2A_3 + 2A_2$	[1]
2382	$A_6 + 2A_3 + A_2 + 2A_1$	[1]
2383	$A_6 + 2A_3 + 4A_1$	[2]
2384	$A_6 + A_3 + 3A_2 + A_1$	[1]
2385	$A_6 + A_3 + 2A_2 + 3A_1$	[1]
2386	$A_6 + A_3 + A_2 + 5A_1$	empty
2387	$A_6 + 5A_2$	empty
2388	$A_6 + 4A_2 + 2A_1$	[1]
2389	$A_6 + 3A_2 + 4A_1$	[1]
2390	$3A_5 + A_1$	[1] , [3]
2391	$2A_5 + A_4 + A_2$	[1]
2392	$2A_5 + A_4 + 2A_1$	[1] , [2]
2393	$2A_5 + 2A_3$	[1] , [2]
2394	$2A_5 + A_3 + A_2 + A_1$	[1] , [2]
2395	$2A_5 + A_3 + 3A_1$	[2]
2396	$2A_5 + 3A_2$	[3]
2397	$2A_5 + 2A_2 + 2A_1$	[1] , [2] , [3] , [6]
2398	$2A_5 + A_2 + 4A_1$	[2]
2399	$2A_5 + 6A_1$	[2, 2]
2400	$A_5 + 2A_4 + A_3$	[1]
2401	$A_5 + 2A_4 + A_2 + A_1$	[1]
2402	$A_5 + 2A_4 + 3A_1$	[1]
2403	$A_5 + A_4 + 2A_3 + A_1$	[1] , [2]
2404	$A_5 + A_4 + A_3 + 2A_2$	[1]
2405	$A_5 + A_4 + A_3 + A_2 + 2A_1$	[1]
2406	$A_5 + A_4 + A_3 + 4A_1$	[2]
2407	$A_5 + A_4 + 3A_2 + A_1$	[1]
2408	$A_5 + A_4 + 2A_2 + 3A_1$	[1]
2409	$A_5 + A_4 + A_2 + 5A_1$	[2]
2410	$A_5 + 3A_3 + A_2$	[1]
2411	$A_5 + 3A_3 + 2A_1$	[2]
2412	$A_5 + 2A_3 + 2A_2 + A_1$	[1] , [2]
2413	$A_5 + 2A_3 + A_2 + 3A_1$	[2]
2414	$A_5 + 2A_3 + 5A_1$	[2, 2]
2415	$A_5 + A_3 + 4A_2$	[3]
2416	$A_5 + A_3 + 3A_2 + 2A_1$	[1]
2417	$A_5 + A_3 + 2A_2 + 4A_1$	[2]
2418	$A_5 + 5A_2 + A_1$	[3]
2419	$A_5 + 4A_2 + 3A_1$	[3]
2420	$4A_4$	[1] , [5]
2421	$3A_4 + A_3 + A_1$	[1]
2422	$3A_4 + 2A_2$	[1]
2423	$3A_4 + A_2 + 2A_1$	[1]
2424	$3A_4 + 4A_1$	[1]
2425	$2A_4 + 2A_3 + A_2$	[1]
2426	$2A_4 + 2A_3 + 2A_1$	[1]
2427	$2A_4 + A_3 + 2A_2 + A_1$	[1]
2428	$2A_4 + A_3 + A_2 + 3A_1$	[1]
2429	$2A_4 + A_3 + 5A_1$	empty
2430	$2A_4 + 4A_2$	[1]
2431	$2A_4 + 3A_2 + 2A_1$	[1]
2432	$2A_4 + 2A_2 + 4A_1$	[1]
2433	$A_4 + 4A_3$	empty
2434	$A_4 + 3A_3 + A_2 + A_1$	[1]
2435	$A_4 + 3A_3 + 3A_1$	[2]
2436	$A_4 + 2A_3 + 3A_2$	[1]
2437	$A_4 + 2A_3 + 2A_2 + 2A_1$	[1]
2438	$A_4 + 2A_3 + A_2 + 4A_1$	[2]
2439	$A_4 + A_3 + 4A_2 + A_1$	[1]
2440	$A_4 + A_3 + 3A_2 + 3A_1$	[1]
2441	$A_4 + 6A_2$	[3]
2442	$A_4 + 5A_2 + 2A_1$	empty
2443	$5A_3 + A_1$	[4]
2444	$4A_3 + 2A_2$	[1] , [2]
2445	$4A_3 + A_2 + 2A_1$	[2] , [4]
2446	$4A_3 + 4A_1$	[2, 2] , [4, 2]
2447	$3A_3 + 3A_2 + A_1$	[1]
2448	$3A_3 + 2A_2 + 3A_1$	[2]
2449	$2A_3 + 5A_2$	empty
2450	$2A_3 + 4A_2 + 2A_1$	[1]
2451	$A_3 + 6A_2 + A_1$	[3]
2452	$8A_2$	[3, 3]

rank 17

2453	$2E_8 + A_1$	[1]
2454	$E_8 + E_7 + A_2$	[1]
2455	$E_8 + E_7 + 2A_1$	[1]
2456	$E_8 + E_6 + A_3$	[1]
2457	$E_8 + E_6 + A_2 + A_1$	[1]
2458	$E_8 + E_6 + 3A_1$	[1]
2459	$E_8 + D_9$	[1]
2460	$E_8 + D_8 + A_1$	[1]
2461	$E_8 + D_7 + A_2$	[1]
2462	$E_8 + D_7 + 2A_1$	[1]
2463	$E_8 + D_6 + A_3$	[1]
2464	$E_8 + D_6 + A_2 + A_1$	[1]
2465	$E_8 + D_6 + 3A_1$	empty
2466	$E_8 + D_5 + D_4$	[1]
2467	$E_8 + D_5 + A_4$	[1]
2468	$E_8 + D_5 + A_3 + A_1$	[1]
2469	$E_8 + D_5 + 2A_2$	[1]
2470	$E_8 + D_5 + A_2 + 2A_1$	[1]
2471	$E_8 + 2D_4 + A_1$	empty
2472	$E_8 + D_4 + A_5$	[1]
2473	$E_8 + D_4 + A_4 + A_1$	[1]
2474	$E_8 + D_4 + A_3 + A_2$	empty
2475	$E_8 + D_4 + A_3 + 2A_1$	empty
2476	$E_8 + D_4 + 2A_2 + A_1$	[1]
2477	$E_8 + A_9$	[1]
2478	$E_8 + A_8 + A_1$	[1]
2479	$E_8 + A_7 + A_2$	[1]
2480	$E_8 + A_7 + 2A_1$	[1]
2481	$E_8 + A_6 + A_3$	[1]
2482	$E_8 + A_6 + A_2 + A_1$	[1]
2483	$E_8 + A_6 + 3A_1$	[1]
2484	$E_8 + A_5 + A_4$	[1]
2485	$E_8 + A_5 + A_3 + A_1$	[1]
2486	$E_8 + A_5 + 2A_2$	[1]

Table 1 (rank 17)

2487	$E_8 + A_5 + A_2 + 2A_1$	[1]
2488	$E_8 + A_5 + 4A_1$	empty
2489	$E_8 + 2A_4 + A_1$	[1]
2490	$E_8 + A_4 + A_3 + A_2$	[1]
2491	$E_8 + A_4 + A_3 + 2A_1$	[1]
2492	$E_8 + A_4 + 2A_2 + A_1$	[1]
2493	$E_8 + A_4 + A_2 + 3A_1$	[1]
2494	$E_8 + 3A_3$	empty
2495	$E_8 + 2A_3 + A_2 + A_1$	[1]
2496	$E_8 + 2A_3 + 3A_1$	empty
2497	$E_8 + A_3 + 3A_2$	[1]
2498	$E_8 + A_3 + 2A_2 + 2A_1$	[1]
2499	$E_8 + 4A_2 + A_1$	empty
2500	$2E_7 + A_3$	[1] , [2]
2501	$2E_7 + A_2 + A_1$	[1]
2502	$2E_7 + 3A_1$	[2]
2503	$E_7 + E_6 + D_4$	[1]
2504	$E_7 + E_6 + A_4$	[1]
2505	$E_7 + E_6 + A_3 + A_1$	[1]
2506	$E_7 + E_6 + 2A_2$	[1]
2507	$E_7 + E_6 + A_2 + 2A_1$	[1]
2508	$E_7 + D_{10}$	[1] , [2]
2509	$E_7 + D_9 + A_1$	[1]
2510	$E_7 + D_8 + A_2$	[1]
2511	$E_7 + D_8 + 2A_1$	[2]
2512	$E_7 + D_7 + A_3$	[1]
2513	$E_7 + D_7 + A_2 + A_1$	[1]
2514	$E_7 + D_7 + 3A_1$	[2]
2515	$E_7 + D_6 + D_4$	[2]
2516	$E_7 + D_6 + A_4$	[1]
2517	$E_7 + D_6 + A_3 + A_1$	[2]
2518	$E_7 + D_6 + 2A_2$	[1]
2519	$E_7 + D_6 + A_2 + 2A_1$	[2]
2520	$E_7 + 2D_5$	[1]
2521	$E_7 + D_5 + D_4 + A_1$	[2]
2522	$E_7 + D_5 + A_5$	[1] , [2]
2523	$E_7 + D_5 + A_4 + A_1$	[1]
2524	$E_7 + D_5 + A_3 + A_2$	[1]
2525	$E_7 + D_5 + A_3 + 2A_1$	[2]
2526	$E_7 + D_5 + 2A_2 + A_1$	[1]
2527	$E_7 + 2D_4 + A_2$	empty
2528	$E_7 + D_4 + A_6$	[1]
2529	$E_7 + D_4 + A_5 + A_1$	[2]
2530	$E_7 + D_4 + A_4 + A_2$	[1]
2531	$E_7 + D_4 + A_4 + 2A_1$	empty
2532	$E_7 + D_4 + 2A_3$	empty
2533	$E_7 + D_4 + A_3 + A_2 + A_1$	[2]
2534	$E_7 + D_4 + 3A_2$	empty
2535	$E_7 + A_{10}$	[1]
2536	$E_7 + A_9 + A_1$	[1] , [2]
2537	$E_7 + A_8 + A_2$	[1]
2538	$E_7 + A_8 + 2A_1$	[1]
2539	$E_7 + A_7 + A_3$	[1]
2540	$E_7 + A_7 + A_2 + A_1$	[1] , [2]
2541	$E_7 + A_7 + 3A_1$	[2]
2542	$E_7 + A_6 + A_4$	[1]
2543	$E_7 + A_6 + A_3 + A_1$	[1]
2544	$E_7 + A_6 + 2A_2$	[1]
2545	$E_7 + A_6 + A_2 + 2A_1$	[1]
2546	$E_7 + A_6 + 4A_1$	empty

2547	$E_7 + 2A_5$	[1]
2548	$E_7 + A_5 + A_4 + A_1$	[1]
2549	$E_7 + A_5 + A_3 + A_2$	[1] , [2]
2550	$E_7 + A_5 + A_3 + 2A_1$	[2]
2551	$E_7 + A_5 + 2A_2 + A_1$	[1]
2552	$E_7 + A_5 + A_2 + 3A_1$	[2]
2553	$E_7 + 2A_4 + A_2$	[1]
2554	$E_7 + 2A_4 + 2A_1$	[1]
2555	$E_7 + A_4 + 2A_3$	[1]
2556	$E_7 + A_4 + A_3 + A_2 + A_1$	[1]
2557	$E_7 + A_4 + A_3 + 3A_1$	[2]
2558	$E_7 + A_4 + 3A_2$	[1]
2559	$E_7 + A_4 + 2A_2 + 2A_1$	[1]
2560	$E_7 + 3A_3 + A_1$	[2]
2561	$E_7 + 2A_3 + 2A_2$	[1]
2562	$E_7 + 2A_3 + A_2 + 2A_1$	[2]
2563	$E_7 + A_3 + 3A_2 + A_1$	[1]
2564	$E_7 + 5A_2$	empty
2565	$2E_6 + D_5$	[1]
2566	$2E_6 + D_4 + A_1$	[1]
2567	$2E_6 + A_5$	[1] , [3]
2568	$2E_6 + A_4 + A_1$	[1]
2569	$2E_6 + A_3 + A_2$	[1]
2570	$2E_6 + A_3 + 2A_1$	[1]
2571	$2E_6 + 2A_2 + A_1$	[3]
2572	$E_6 + D_{11}$	[1]
2573	$E_6 + D_{10} + A_1$	[1]
2574	$E_6 + D_9 + A_2$	[1]
2575	$E_6 + D_9 + 2A_1$	[1]
2576	$E_6 + D_8 + A_3$	[1]
2577	$E_6 + D_8 + A_2 + A_1$	[1]
2578	$E_6 + D_8 + 3A_1$	empty
2579	$E_6 + D_7 + D_4$	[1]
2580	$E_6 + D_7 + A_4$	[1]
2581	$E_6 + D_7 + A_3 + A_1$	[1]
2582	$E_6 + D_7 + 2A_2$	empty
2583	$E_6 + D_7 + A_2 + 2A_1$	[1]
2584	$E_6 + D_6 + D_5$	[1]
2585	$E_6 + D_6 + D_4 + A_1$	empty
2586	$E_6 + D_6 + A_5$	[1]
2587	$E_6 + D_6 + A_4 + A_1$	[1]
2588	$E_6 + D_6 + A_3 + A_2$	[1]
2589	$E_6 + D_6 + A_3 + 2A_1$	empty
2590	$E_6 + D_6 + 2A_2 + A_1$	[1]
2591	$E_6 + 2D_5 + A_1$	[1]
2592	$E_6 + D_5 + D_4 + A_2$	[1]
2593	$E_6 + D_5 + A_6$	[1]
2594	$E_6 + D_5 + A_5 + A_1$	[1]
2595	$E_6 + D_5 + A_4 + A_2$	[1]
2596	$E_6 + D_5 + A_4 + 2A_1$	[1]
2597	$E_6 + D_5 + 2A_3$	[1]
2598	$E_6 + D_5 + A_3 + A_2 + A_1$	[1]
2599	$E_6 + D_5 + 3A_2$	empty
2600	$E_6 + 2D_4 + A_3$	empty
2601	$E_6 + D_4 + A_7$	[1]
2602	$E_6 + D_4 + A_6 + A_1$	[1]
2603	$E_6 + D_4 + A_5 + A_2$	empty
2604	$E_6 + D_4 + A_5 + 2A_1$	empty
2605	$E_6 + D_4 + A_4 + A_3$	[1]
2606	$E_6 + D_4 + A_4 + A_2 + A_1$	[1]

Table 1 (rank 17)

2607	$E_6 + D_4 + 2A_3 + A_1$	empty
2608	$E_6 + D_4 + A_3 + 2A_2$	empty
2609	$E_6 + A_{11}$	[1] , [3]
2610	$E_6 + A_{10} + A_1$	[1]
2611	$E_6 + A_9 + A_2$	[1]
2612	$E_6 + A_9 + 2A_1$	[1]
2613	$E_6 + A_8 + A_3$	[1]
2614	$E_6 + A_8 + A_2 + A_1$	[1] , [3]
2615	$E_6 + A_8 + 3A_1$	[1]
2616	$E_6 + A_7 + A_4$	[1]
2617	$E_6 + A_7 + A_3 + A_1$	[1]
2618	$E_6 + A_7 + 2A_2$	[1]
2619	$E_6 + A_7 + A_2 + 2A_1$	[1]
2620	$E_6 + A_7 + 4A_1$	empty
2621	$E_6 + A_6 + A_5$	[1]
2622	$E_6 + A_6 + A_4 + A_1$	[1]
2623	$E_6 + A_6 + A_3 + A_2$	[1]
2624	$E_6 + A_6 + A_3 + 2A_1$	[1]
2625	$E_6 + A_6 + 2A_2 + A_1$	[1]
2626	$E_6 + A_6 + A_2 + 3A_1$	[1]
2627	$E_6 + 2A_5 + A_1$	[1] , [3]
2628	$E_6 + A_5 + A_4 + A_2$	[1]
2629	$E_6 + A_5 + A_4 + 2A_1$	[1]
2630	$E_6 + A_5 + 2A_3$	[1]
2631	$E_6 + A_5 + A_3 + A_2 + A_1$	[1]
2632	$E_6 + A_5 + A_3 + 3A_1$	empty
2633	$E_6 + A_5 + 3A_2$	[3]
2634	$E_6 + A_5 + 2A_2 + 2A_1$	[3]
2635	$E_6 + 2A_4 + A_3$	[1]
2636	$E_6 + 2A_4 + A_2 + A_1$	[1]
2637	$E_6 + 2A_4 + 3A_1$	[1]
2638	$E_6 + A_4 + 2A_3 + A_1$	[1]
2639	$E_6 + A_4 + A_3 + 2A_2$	[1]
2640	$E_6 + A_4 + A_3 + A_2 + 2A_1$	[1]
2641	$E_6 + A_4 + 3A_2 + A_1$	empty
2642	$E_6 + 3A_3 + A_2$	empty
2643	$E_6 + 3A_3 + 2A_1$	empty
2644	$E_6 + 2A_3 + 2A_2 + A_1$	[1]
2645	$E_6 + A_3 + 4A_2$	[3]
2646	D_{17}	[1]
2647	$D_{16} + A_1$	[1] , [2]
2648	$D_{15} + A_2$	[1]
2649	$D_{15} + 2A_1$	[1]
2650	$D_{14} + A_3$	[1]
2651	$D_{14} + A_2 + A_1$	[1] , [2]
2652	$D_{14} + 3A_1$	[2]
2653	$D_{13} + D_4$	[1]
2654	$D_{13} + A_4$	[1]
2655	$D_{13} + A_3 + A_1$	[1]
2656	$D_{13} + 2A_2$	[1]
2657	$D_{13} + A_2 + 2A_1$	[1]
2658	$D_{13} + 4A_1$	empty
2659	$D_{12} + D_5$	[1] , [2]
2660	$D_{12} + D_4 + A_1$	[2]
2661	$D_{12} + A_5$	[1]
2662	$D_{12} + A_4 + A_1$	[1]
2663	$D_{12} + A_3 + A_2$	[2]
2664	$D_{12} + A_3 + 2A_1$	[2]
2665	$D_{12} + 2A_2 + A_1$	[1]
2666	$D_{12} + A_2 + 3A_1$	[2]
2667	$D_{12} + 5A_1$	empty
2668	$D_{11} + D_6$	[1]
2669	$D_{11} + D_5 + A_1$	[1]
2670	$D_{11} + D_4 + A_2$	empty
2671	$D_{11} + D_4 + 2A_1$	empty
2672	$D_{11} + A_6$	[1]
2673	$D_{11} + A_5 + A_1$	[1]
2674	$D_{11} + A_4 + A_2$	[1]
2675	$D_{11} + A_4 + 2A_1$	[1]
2676	$D_{11} + 2A_3$	empty
2677	$D_{11} + A_3 + A_2 + A_1$	[1]
2678	$D_{11} + A_3 + 3A_1$	empty
2679	$D_{11} + 3A_2$	[1]
2680	$D_{11} + 2A_2 + 2A_1$	[1]
2681	$D_{11} + A_2 + 4A_1$	empty
2682	$D_{10} + D_7$	[1]
2683	$D_{10} + D_6 + A_1$	[2]
2684	$D_{10} + D_5 + A_2$	[1]
2685	$D_{10} + D_5 + 2A_1$	[2]
2686	$D_{10} + D_4 + A_3$	empty
2687	$D_{10} + D_4 + A_2 + A_1$	[2]
2688	$D_{10} + D_4 + 3A_1$	empty
2689	$D_{10} + A_7$	[1]
2690	$D_{10} + A_6 + A_1$	[1]
2691	$D_{10} + A_5 + A_2$	[1] , [2]
2692	$D_{10} + A_5 + 2A_1$	[2]
2693	$D_{10} + A_4 + A_3$	[1]
2694	$D_{10} + A_4 + A_2 + A_1$	[1]
2695	$D_{10} + A_4 + 3A_1$	[2]
2696	$D_{10} + 2A_3 + A_1$	[2]
2697	$D_{10} + A_3 + 2A_2$	[1]
2698	$D_{10} + A_3 + A_2 + 2A_1$	[2]
2699	$D_{10} + A_3 + 4A_1$	[2, 2]
2700	$D_{10} + 3A_2 + A_1$	empty
2701	$D_{10} + 2A_2 + 3A_1$	[2]
2702	$D_9 + D_8$	[1]
2703	$D_9 + D_7 + A_1$	[1]
2704	$D_9 + D_6 + A_2$	[1]
2705	$D_9 + D_6 + 2A_1$	empty
2706	$D_9 + D_5 + A_3$	[1]
2707	$D_9 + D_5 + A_2 + A_1$	[1]
2708	$D_9 + D_5 + 3A_1$	empty
2709	$D_9 + 2D_4$	empty
2710	$D_9 + D_4 + A_4$	[1]
2711	$D_9 + D_4 + A_3 + A_1$	empty
2712	$D_9 + D_4 + 2A_2$	empty
2713	$D_9 + D_4 + A_2 + 2A_1$	empty
2714	$D_9 + A_8$	[1]
2715	$D_9 + A_7 + A_1$	[1]
2716	$D_9 + A_6 + A_2$	[1]
2717	$D_9 + A_6 + 2A_1$	[1]
2718	$D_9 + A_5 + A_3$	[1]
2719	$D_9 + A_5 + A_2 + A_1$	[1]
2720	$D_9 + A_5 + 3A_1$	[2]
2721	$D_9 + 2A_4$	[1]
2722	$D_9 + A_4 + A_3 + A_1$	[1]
2723	$D_9 + A_4 + 2A_2$	[1]
2724	$D_9 + A_4 + A_2 + 2A_1$	[1]
2725	$D_9 + A_4 + 4A_1$	empty
2726	$D_9 + 2A_3 + A_2$	empty

Table 1 (rank 17)

2727	$D_9 + 2A_3 + 2A_1$	[2]
2728	$D_9 + A_3 + 2A_2 + A_1$	[1]
2729	$D_9 + A_3 + A_2 + 3A_1$	empty
2730	$D_9 + 4A_2$	empty
2731	$D_9 + 3A_2 + 2A_1$	[1]
2732	$2D_8 + A_1$	[2]
2733	$D_8 + D_7 + A_2$	empty
2734	$D_8 + D_7 + 2A_1$	[2]
2735	$D_8 + D_6 + A_3$	[2]
2736	$D_8 + D_6 + A_2 + A_1$	[2]
2737	$D_8 + D_6 + 3A_1$	[2, 2]
2738	$D_8 + D_5 + D_4$	[2]
2739	$D_8 + D_5 + A_4$	[1]
2740	$D_8 + D_5 + A_3 + A_1$	[2]
2741	$D_8 + D_5 + 2A_2$	empty
2742	$D_8 + D_5 + A_2 + 2A_1$	[2]
2743	$D_8 + 2D_4 + A_1$	empty
2744	$D_8 + D_4 + A_5$	empty
2745	$D_8 + D_4 + A_4 + A_1$	empty
2746	$D_8 + D_4 + A_3 + A_2$	empty
2747	$D_8 + D_4 + A_3 + 2A_1$	[2, 2]
2748	$D_8 + D_4 + 2A_2 + A_1$	empty
2749	$D_8 + A_9$	[1]
2750	$D_8 + A_8 + A_1$	[1]
2751	$D_8 + A_7 + A_2$	[2]
2752	$D_8 + A_7 + 2A_1$	[2]
2753	$D_8 + A_6 + A_3$	empty
2754	$D_8 + A_6 + A_2 + A_1$	[1]
2755	$D_8 + A_6 + 3A_1$	empty
2756	$D_8 + A_5 + A_4$	[1]
2757	$D_8 + A_5 + A_3 + A_1$	[2]
2758	$D_8 + A_5 + 2A_2$	[1]
2759	$D_8 + A_5 + A_2 + 2A_1$	[2]
2760	$D_8 + A_5 + 4A_1$	[2, 2]
2761	$D_8 + 2A_4 + A_1$	[1]
2762	$D_8 + A_4 + A_3 + A_2$	empty
2763	$D_8 + A_4 + A_3 + 2A_1$	[2]
2764	$D_8 + A_4 + 2A_2 + A_1$	[1]
2765	$D_8 + A_4 + A_2 + 3A_1$	empty
2766	$D_8 + 3A_3$	empty
2767	$D_8 + 2A_3 + A_2 + A_1$	[2]
2768	$D_8 + 2A_3 + 3A_1$	[2, 2]
2769	$D_8 + A_3 + 3A_2$	[1]
2770	$D_8 + A_3 + 2A_2 + 2A_1$	[2]
2771	$D_8 + 4A_2 + A_1$	empty
2772	$2D_7 + A_3$	empty
2773	$2D_7 + A_2 + A_1$	[1]
2774	$2D_7 + 3A_1$	empty
2775	$D_7 + D_6 + D_4$	empty
2776	$D_7 + D_6 + A_4$	[1]
2777	$D_7 + D_6 + A_3 + A_1$	[2]
2778	$D_7 + D_6 + 2A_2$	[1]
2779	$D_7 + D_6 + A_2 + 2A_1$	empty
2780	$D_7 + 2D_5$	[1]
2781	$D_7 + D_5 + D_4 + A_1$	empty
2782	$D_7 + D_5 + A_5$	[1]
2783	$D_7 + D_5 + A_4 + A_1$	[1]
2784	$D_7 + D_5 + A_3 + A_2$	empty
2785	$D_7 + D_5 + A_3 + 2A_1$	[2]
2786	$D_7 + D_5 + 2A_2 + A_1$	[1]

2787	$D_7 + 2D_4 + A_2$	empty
2788	$D_7 + D_4 + A_6$	empty
2789	$D_7 + D_4 + A_5 + A_1$	[2]
2790	$D_7 + D_4 + A_4 + A_2$	empty
2791	$D_7 + D_4 + A_4 + 2A_1$	empty
2792	$D_7 + D_4 + 2A_3$	empty
2793	$D_7 + D_4 + A_3 + A_2 + A_1$	empty
2794	$D_7 + D_4 + 3A_2$	[1]
2795	$D_7 + A_{10}$	[1]
2796	$D_7 + A_9 + A_1$	[1] , [2]
2797	$D_7 + A_8 + A_2$	[1]
2798	$D_7 + A_8 + 2A_1$	[1]
2799	$D_7 + A_7 + A_3$	[4]
2800	$D_7 + A_7 + A_2 + A_1$	[1]
2801	$D_7 + A_7 + 3A_1$	[2]
2802	$D_7 + A_6 + A_4$	[1]
2803	$D_7 + A_6 + A_3 + A_1$	[1]
2804	$D_7 + A_6 + 2A_2$	[1]
2805	$D_7 + A_6 + A_2 + 2A_1$	[1]
2806	$D_7 + A_6 + 4A_1$	empty
2807	$D_7 + 2A_5$	[1] , [2]
2808	$D_7 + A_5 + A_4 + A_1$	[1]
2809	$D_7 + A_5 + A_3 + A_2$	[1]
2810	$D_7 + A_5 + A_3 + 2A_1$	[2]
2811	$D_7 + A_5 + 2A_2 + A_1$	empty
2812	$D_7 + A_5 + A_2 + 3A_1$	[2]
2813	$D_7 + 2A_4 + A_2$	[1]
2814	$D_7 + 2A_4 + 2A_1$	[1]
2815	$D_7 + A_4 + 2A_3$	empty
2816	$D_7 + A_4 + A_3 + A_2 + A_1$	[1]
2817	$D_7 + A_4 + A_3 + 3A_1$	empty
2818	$D_7 + A_4 + 3A_2$	empty
2819	$D_7 + A_4 + 2A_2 + 2A_1$	[1]
2820	$D_7 + 3A_3 + A_1$	[4]
2821	$D_7 + 2A_3 + 2A_2$	[1]
2822	$D_7 + 2A_3 + A_2 + 2A_1$	[2]
2823	$D_7 + A_3 + 3A_2 + A_1$	empty
2824	$D_7 + 5A_2$	empty
2825	$2D_6 + D_5$	[2]
2826	$2D_6 + D_4 + A_1$	[2, 2]
2827	$2D_6 + A_5$	[2]
2828	$2D_6 + A_4 + A_1$	empty
2829	$2D_6 + A_3 + A_2$	[2]
2830	$2D_6 + A_3 + 2A_1$	[2, 2]
2831	$2D_6 + 2A_2 + A_1$	empty
2832	$D_6 + 2D_5 + A_1$	[2]
2833	$D_6 + D_5 + D_4 + A_2$	empty
2834	$D_6 + D_5 + A_6$	[1]
2835	$D_6 + D_5 + A_5 + A_1$	[2]
2836	$D_6 + D_5 + A_4 + A_2$	[1]
2837	$D_6 + D_5 + A_4 + 2A_1$	empty
2838	$D_6 + D_5 + 2A_3$	[2]
2839	$D_6 + D_5 + A_3 + A_2 + A_1$	[2]
2840	$D_6 + D_5 + 3A_2$	[1]
2841	$D_6 + 2D_4 + A_3$	empty
2842	$D_6 + D_4 + A_7$	[2]
2843	$D_6 + D_4 + A_6 + A_1$	empty
2844	$D_6 + D_4 + A_5 + A_2$	[2]
2845	$D_6 + D_4 + A_5 + 2A_1$	empty
2846	$D_6 + D_4 + A_4 + A_3$	empty

Table 1 (rank 17)

2847	$D_6 + D_4 + A_4 + A_2 + A_1$	empty
2848	$D_6 + D_4 + 2A_3 + A_1$	[2, 2]
2849	$D_6 + D_4 + A_3 + 2A_2$	empty
2850	$D_6 + A_{11}$	[1] , [2]
2851	$D_6 + A_{10} + A_1$	[1]
2852	$D_6 + A_9 + A_2$	[1] , [2]
2853	$D_6 + A_9 + 2A_1$	[2]
2854	$D_6 + A_8 + A_3$	[1]
2855	$D_6 + A_8 + A_2 + A_1$	[1]
2856	$D_6 + A_8 + 3A_1$	empty
2857	$D_6 + A_7 + A_4$	[1]
2858	$D_6 + A_7 + A_3 + A_1$	[2]
2859	$D_6 + A_7 + 2A_2$	[1]
2860	$D_6 + A_7 + A_2 + 2A_1$	[2]
2861	$D_6 + A_7 + 4A_1$	empty
2862	$D_6 + A_6 + A_5$	[1]
2863	$D_6 + A_6 + A_4 + A_1$	[1]
2864	$D_6 + A_6 + A_3 + A_2$	[1]
2865	$D_6 + A_6 + A_3 + 2A_1$	empty
2866	$D_6 + A_6 + 2A_2 + A_1$	[1]
2867	$D_6 + A_6 + A_2 + 3A_1$	empty
2868	$D_6 + 2A_5 + A_1$	[2]
2869	$D_6 + A_5 + A_4 + A_2$	[1]
2870	$D_6 + A_5 + A_4 + 2A_1$	[2]
2871	$D_6 + A_5 + 2A_3$	[2]
2872	$D_6 + A_5 + A_3 + A_2 + A_1$	[2]
2873	$D_6 + A_5 + A_3 + 3A_1$	[2, 2]
2874	$D_6 + A_5 + 3A_2$	empty
2875	$D_6 + A_5 + 2A_2 + 2A_1$	[2]
2876	$D_6 + 2A_4 + A_3$	[1]
2877	$D_6 + 2A_4 + A_2 + A_1$	[1]
2878	$D_6 + 2A_4 + 3A_1$	empty
2879	$D_6 + A_4 + 2A_3 + A_1$	[2]
2880	$D_6 + A_4 + A_3 + 2A_2$	[1]
2881	$D_6 + A_4 + A_3 + A_2 + 2A_1$	empty
2882	$D_6 + A_4 + 3A_2 + A_1$	[1]
2883	$D_6 + 3A_3 + A_2$	[2]
2884	$D_6 + 3A_3 + 2A_1$	[2, 2]
2885	$D_6 + 2A_3 + 2A_2 + A_1$	[2]
2886	$D_6 + A_3 + 4A_2$	empty
2887	$3D_5 + A_2$	[1]
2888	$2D_5 + D_4 + A_3$	[2]
2889	$2D_5 + A_7$	[1] , [2] , [4]
2890	$2D_5 + A_6 + A_1$	[1]
2891	$2D_5 + A_5 + A_2$	[1]
2892	$2D_5 + A_5 + 2A_1$	[2]
2893	$2D_5 + A_4 + A_3$	[1]
2894	$2D_5 + A_4 + A_2 + A_1$	[1]
2895	$2D_5 + 2A_3 + A_1$	[4]
2896	$2D_5 + A_3 + 2A_2$	empty
2897	$D_5 + 2D_4 + A_4$	empty
2898	$D_5 + D_4 + A_8$	[1]
2899	$D_5 + D_4 + A_7 + A_1$	[2]
2900	$D_5 + D_4 + A_6 + A_2$	empty
2901	$D_5 + D_4 + A_6 + 2A_1$	empty
2902	$D_5 + D_4 + A_5 + A_3$	empty
2903	$D_5 + D_4 + A_5 + A_2 + A_1$	[2]
2904	$D_5 + D_4 + 2A_4$	[1]
2905	$D_5 + D_4 + A_4 + A_3 + A_1$	empty
2906	$D_5 + D_4 + A_4 + 2A_2$	empty

2907	$D_5 + D_4 + 2A_3 + A_2$	empty
2908	$D_5 + A_{12}$	[1]
2909	$D_5 + A_{11} + A_1$	[1] , [2] , [4]
2910	$D_5 + A_{10} + A_2$	[1]
2911	$D_5 + A_{10} + 2A_1$	[1]
2912	$D_5 + A_9 + A_3$	[1]
2913	$D_5 + A_9 + A_2 + A_1$	[1] , [2]
2914	$D_5 + A_9 + 3A_1$	[2]
2915	$D_5 + A_8 + A_4$	[1]
2916	$D_5 + A_8 + A_3 + A_1$	[1]
2917	$D_5 + A_8 + 2A_2$	[1]
2918	$D_5 + A_8 + A_2 + 2A_1$	[1]
2919	$D_5 + A_8 + 4A_1$	empty
2920	$D_5 + A_7 + A_5$	[1]
2921	$D_5 + A_7 + A_4 + A_1$	[1]
2922	$D_5 + A_7 + A_3 + A_2$	[2]
2923	$D_5 + A_7 + A_3 + 2A_1$	[2] , [4]
2924	$D_5 + A_7 + 2A_2 + A_1$	[1]
2925	$D_5 + A_7 + A_2 + 3A_1$	[2]
2926	$D_5 + 2A_6$	[1]
2927	$D_5 + A_6 + A_5 + A_1$	[1]
2928	$D_5 + A_6 + A_4 + A_2$	[1]
2929	$D_5 + A_6 + A_4 + 2A_1$	[1]
2930	$D_5 + A_6 + 2A_3$	empty
2931	$D_5 + A_6 + A_3 + A_2 + A_1$	[1]
2932	$D_5 + A_6 + A_3 + 3A_1$	empty
2933	$D_5 + A_6 + 3A_2$	[1]
2934	$D_5 + A_6 + 2A_2 + 2A_1$	[1]
2935	$D_5 + 2A_5 + A_2$	[1] , [2]
2936	$D_5 + 2A_5 + 2A_1$	[2]
2937	$D_5 + A_5 + A_4 + A_3$	[1]
2938	$D_5 + A_5 + A_4 + A_2 + A_1$	[1]
2939	$D_5 + A_5 + A_4 + 3A_1$	[2]
2940	$D_5 + A_5 + 2A_3 + A_1$	[2]
2941	$D_5 + A_5 + A_3 + 2A_2$	[1]
2942	$D_5 + A_5 + A_3 + A_2 + 2A_1$	[2]
2943	$D_5 + A_5 + 3A_2 + A_1$	empty
2944	$D_5 + 3A_4$	[1]
2945	$D_5 + 2A_4 + A_3 + A_1$	[1]
2946	$D_5 + 2A_4 + 2A_2$	[1]
2947	$D_5 + 2A_4 + A_2 + 2A_1$	[1]
2948	$D_5 + A_4 + 2A_3 + A_2$	empty
2949	$D_5 + A_4 + 2A_3 + 2A_1$	[2]
2950	$D_5 + A_4 + A_3 + 2A_2 + A_1$	[1]
2951	$D_5 + A_4 + 4A_2$	empty
2952	$D_5 + 4A_3$	empty
2953	$D_5 + 3A_3 + A_2 + A_1$	[4]
2954	$D_5 + 2A_3 + 3A_2$	[1]
2955	$3D_4 + A_5$	empty
2956	$2D_4 + A_9$	empty
2957	$2D_4 + A_8 + A_1$	empty
2958	$2D_4 + A_7 + A_2$	empty
2959	$2D_4 + A_7 + 2A_1$	empty
2960	$2D_4 + A_6 + A_3$	empty
2961	$2D_4 + A_6 + A_2 + A_1$	empty
2962	$2D_4 + A_5 + A_4$	empty
2963	$2D_4 + A_5 + A_3 + A_1$	empty
2964	$2D_4 + A_5 + 2A_2$	empty
2965	$2D_4 + 2A_4 + A_1$	empty
2966	$2D_4 + A_4 + A_3 + A_2$	empty

Table 1 (rank 17)

2967	$2\,D_4 + 3\,A_3$	empty
2968	$D_4 + A_{13}$	[1]
2969	$D_4 + A_{12} + A_1$	[1]
2970	$D_4 + A_{11} + A_2$	[2]
2971	$D_4 + A_{11} + 2\,A_1$	[2]
2972	$D_4 + A_{10} + A_3$	empty
2973	$D_4 + A_{10} + A_2 + A_1$	[1]
2974	$D_4 + A_{10} + 3\,A_1$	empty
2975	$D_4 + A_9 + A_4$	[1]
2976	$D_4 + A_9 + A_3 + A_1$	[2]
2977	$D_4 + A_9 + 2\,A_2$	[1]
2978	$D_4 + A_9 + A_2 + 2\,A_1$	[2]
2979	$D_4 + A_9 + 4\,A_1$	empty
2980	$D_4 + A_8 + A_5$	[1]
2981	$D_4 + A_8 + A_4 + A_1$	[1]
2982	$D_4 + A_8 + A_3 + A_2$	empty
2983	$D_4 + A_8 + A_3 + 2\,A_1$	empty
2984	$D_4 + A_8 + 2\,A_2 + A_1$	empty
2985	$D_4 + A_8 + A_2 + 3\,A_1$	empty
2986	$D_4 + A_7 + A_6$	empty
2987	$D_4 + A_7 + A_5 + A_1$	empty
2988	$D_4 + A_7 + A_4 + A_2$	empty
2989	$D_4 + A_7 + A_4 + 2\,A_1$	[2]
2990	$D_4 + A_7 + 2\,A_3$	empty
2991	$D_4 + A_7 + A_3 + A_2 + A_1$	[2]
2992	$D_4 + A_7 + A_3 + 3\,A_1$	empty
2993	$D_4 + A_7 + 3\,A_2$	empty
2994	$D_4 + A_7 + 2\,A_2 + 2\,A_1$	[2]
2995	$D_4 + 2\,A_6 + A_1$	[1]
2996	$D_4 + A_6 + A_5 + A_2$	[1]
2997	$D_4 + A_6 + A_5 + 2\,A_1$	empty
2998	$D_4 + A_6 + A_4 + A_3$	empty
2999	$D_4 + A_6 + A_4 + A_2 + A_1$	[1]
3000	$D_4 + A_6 + A_4 + 3\,A_1$	empty
3001	$D_4 + A_6 + 2\,A_3 + A_1$	empty
3002	$D_4 + A_6 + A_3 + 2\,A_2$	[1]
3003	$D_4 + A_6 + A_3 + A_2 + 2\,A_1$	empty
3004	$D_4 + A_6 + 3\,A_2 + A_1$	empty
3005	$D_4 + 2\,A_5 + A_3$	[2]
3006	$D_4 + 2\,A_5 + A_2 + A_1$	empty
3007	$D_4 + 2\,A_5 + 3\,A_1$	[2, 2]
3008	$D_4 + A_5 + 2\,A_4$	[1]
3009	$D_4 + A_5 + A_4 + A_3 + A_1$	[2]
3010	$D_4 + A_5 + A_4 + 2\,A_2$	empty
3011	$D_4 + A_5 + A_4 + A_2 + 2\,A_1$	empty
3012	$D_4 + A_5 + 2\,A_3 + A_2$	empty
3013	$D_4 + A_5 + 2\,A_3 + 2\,A_1$	[2, 2]
3014	$D_4 + A_5 + A_3 + 2\,A_2 + A_1$	empty
3015	$D_4 + A_5 + 4\,A_2$	empty
3016	$D_4 + 3\,A_4 + A_1$	empty
3017	$D_4 + 2\,A_4 + A_3 + A_2$	empty
3018	$D_4 + 2\,A_4 + A_3 + 2\,A_1$	empty
3019	$D_4 + 2\,A_4 + 2\,A_2 + A_1$	[1]
3020	$D_4 + A_4 + 3\,A_3$	empty
3021	$D_4 + A_4 + 2\,A_3 + A_2 + A_1$	empty
3022	$D_4 + A_4 + A_3 + 3\,A_2$	empty
3023	$D_4 + 4\,A_3 + A_1$	empty
3024	$D_4 + 3\,A_3 + 2\,A_2$	[2]
3025	A_{17}	[1] , [3]
3026	$A_{16} + A_1$	[1]
3027	$A_{15} + A_2$	[1] , [2]
3028	$A_{15} + 2\,A_1$	[1] , [2] , [4]
3029	$A_{14} + A_3$	[1]
3030	$A_{14} + A_2 + A_1$	[1] , [3]
3031	$A_{14} + 3\,A_1$	[1]
3032	$A_{13} + A_4$	[1]
3033	$A_{13} + A_3 + A_1$	[1] , [2]
3034	$A_{13} + 2\,A_2$	[1]
3035	$A_{13} + A_2 + 2\,A_1$	[1] , [2]
3036	$A_{13} + 4\,A_1$	[2]
3037	$A_{12} + A_5$	[1]
3038	$A_{12} + A_4 + A_1$	[1]
3039	$A_{12} + A_3 + A_2$	[1]
3040	$A_{12} + A_3 + 2\,A_1$	[1]
3041	$A_{12} + 2\,A_2 + A_1$	[1]
3042	$A_{12} + A_2 + 3\,A_1$	[1]
3043	$A_{12} + 5\,A_1$	empty
3044	$A_{11} + A_6$	[1]
3045	$A_{11} + A_5 + A_1$	[1] , [3]
3046	$A_{11} + A_4 + A_2$	[1]
3047	$A_{11} + A_4 + 2\,A_1$	[1] , [2]
3048	$A_{11} + 2\,A_3$	[4]
3049	$A_{11} + A_3 + A_2 + A_1$	[1] , [2]
3050	$A_{11} + A_3 + 3\,A_1$	[2] , [4]
3051	$A_{11} + 3\,A_2$	[3]
3052	$A_{11} + 2\,A_2 + 2\,A_1$	[1] , [2] , [3] , [6]
3053	$A_{11} + A_2 + 4\,A_1$	[2]
3054	$A_{11} + 6\,A_1$	empty
3055	$A_{10} + A_7$	[1]
3056	$A_{10} + A_6 + A_1$	[1]
3057	$A_{10} + A_5 + A_2$	[1]
3058	$A_{10} + A_5 + 2\,A_1$	[1]
3059	$A_{10} + A_4 + A_3$	[1]
3060	$A_{10} + A_4 + A_2 + A_1$	[1]
3061	$A_{10} + A_4 + 3\,A_1$	[1]
3062	$A_{10} + 2\,A_3 + A_1$	[1]
3063	$A_{10} + A_3 + 2\,A_2$	[1]
3064	$A_{10} + A_3 + A_2 + 2\,A_1$	[1]
3065	$A_{10} + A_3 + 4\,A_1$	empty
3066	$A_{10} + 3\,A_2 + A_1$	[1]
3067	$A_{10} + 2\,A_2 + 3\,A_1$	[1]
3068	$A_{10} + A_2 + 5\,A_1$	empty
3069	$A_9 + A_8$	[1]
3070	$A_9 + A_7 + A_1$	[1]
3071	$A_9 + A_6 + A_2$	[1]
3072	$A_9 + A_6 + 2\,A_1$	[1]
3073	$A_9 + A_5 + A_3$	[1] , [2]
3074	$A_9 + A_5 + A_2 + A_1$	[1] , [2]
3075	$A_9 + A_5 + 3\,A_1$	[2]
3076	$A_9 + 2\,A_4$	[1] , [5]
3077	$A_9 + A_4 + A_3 + A_1$	[1] , [2]
3078	$A_9 + A_4 + 2\,A_2$	[1]
3079	$A_9 + A_4 + A_2 + 2\,A_1$	[1]
3080	$A_9 + A_4 + 4\,A_1$	[2]
3081	$A_9 + 2\,A_3 + A_2$	[1]
3082	$A_9 + 2\,A_3 + 2\,A_1$	[2]
3083	$A_9 + A_3 + 2\,A_2 + A_1$	[1] , [2]
3084	$A_9 + A_3 + A_2 + 3\,A_1$	[2]
3085	$A_9 + A_3 + 5\,A_1$	empty
3086	$A_9 + 4\,A_2$	empty

Table 1 (rank 17)

3087	$A_9 + 3A_2 + 2A_1$	[1]
3088	$A_9 + 2A_2 + 4A_1$	[2]
3089	$2A_8 + A_1$	[1] , [3]
3090	$A_8 + A_7 + A_2$	[1]
3091	$A_8 + A_7 + 2A_1$	[1]
3092	$A_8 + A_6 + A_3$	[1]
3093	$A_8 + A_6 + A_2 + A_1$	[1]
3094	$A_8 + A_6 + 3A_1$	[1]
3095	$A_8 + A_5 + A_4$	[1]
3096	$A_8 + A_5 + A_3 + A_1$	[1]
3097	$A_8 + A_5 + 2A_2$	[3]
3098	$A_8 + A_5 + A_2 + 2A_1$	[1] , [3]
3099	$A_8 + A_5 + 4A_1$	empty
3100	$A_8 + 2A_4 + A_1$	[1]
3101	$A_8 + A_4 + A_3 + A_2$	[1]
3102	$A_8 + A_4 + A_3 + 2A_1$	[1]
3103	$A_8 + A_4 + 2A_2 + A_1$	[1]
3104	$A_8 + A_4 + A_2 + 3A_1$	[1]
3105	$A_8 + A_4 + 5A_1$	empty
3106	$A_8 + 3A_3$	empty
3107	$A_8 + 2A_3 + A_2 + A_1$	[1]
3108	$A_8 + 2A_3 + 3A_1$	empty
3109	$A_8 + A_3 + 3A_2$	[3]
3110	$A_8 + A_3 + 2A_2 + 2A_1$	[1]
3111	$A_8 + A_3 + A_2 + 4A_1$	empty
3112	$A_8 + 4A_2 + A_1$	[3]
3113	$A_8 + 3A_2 + 3A_1$	[3]
3114	$2A_7 + A_3$	[4]
3115	$2A_7 + A_2 + A_1$	[1] , [2]
3116	$2A_7 + 3A_1$	[4]
3117	$A_7 + A_6 + A_4$	[1]
3118	$A_7 + A_6 + A_3 + A_1$	[1]
3119	$A_7 + A_6 + 2A_2$	[1]
3120	$A_7 + A_6 + A_2 + 2A_1$	[1]
3121	$A_7 + A_6 + 4A_1$	[2]
3122	$A_7 + 2A_5$	[1]
3123	$A_7 + A_5 + A_4 + A_1$	[1] , [2]
3124	$A_7 + A_5 + A_3 + A_2$	[1]
3125	$A_7 + A_5 + A_3 + 2A_1$	[2]
3126	$A_7 + A_5 + 2A_2 + A_1$	[1] , [2]
3127	$A_7 + A_5 + A_2 + 3A_1$	[2]
3128	$A_7 + A_5 + 5A_1$	[2, 2]
3129	$A_7 + 2A_4 + A_2$	[1]
3130	$A_7 + 2A_4 + 2A_1$	[1]
3131	$A_7 + A_4 + 2A_3$	empty
3132	$A_7 + A_4 + A_3 + A_2 + A_1$	[1]
3133	$A_7 + A_4 + A_3 + 3A_1$	[2]
3134	$A_7 + A_4 + 3A_2$	[1]
3135	$A_7 + A_4 + 2A_2 + 2A_1$	[1]
3136	$A_7 + A_4 + A_2 + 4A_1$	[2]
3137	$A_7 + 3A_3 + A_1$	[4]
3138	$A_7 + 2A_3 + 2A_2$	[1] , [2]
3139	$A_7 + 2A_3 + A_2 + 2A_1$	[2] , [4]
3140	$A_7 + 2A_3 + 4A_1$	[2, 2] , [4, 2]
3141	$A_7 + A_3 + 3A_2 + A_1$	[1]
3142	$A_7 + A_3 + 2A_2 + 3A_1$	[2]
3143	$A_7 + 5A_2$	empty
3144	$A_7 + 4A_2 + 2A_1$	empty
3145	$2A_6 + A_5$	[1]
3146	$2A_6 + A_4 + A_1$	[1]
3147	$2A_6 + A_3 + A_2$	[1]
3148	$2A_6 + A_3 + 2A_1$	[1]
3149	$2A_6 + 2A_2 + A_1$	[1]
3150	$2A_6 + A_2 + 3A_1$	[1]
3151	$2A_6 + 5A_1$	empty
3152	$A_6 + 2A_5 + A_1$	[1]
3153	$A_6 + A_5 + A_4 + A_2$	[1]
3154	$A_6 + A_5 + A_4 + 2A_1$	[1]
3155	$A_6 + A_5 + 2A_3$	[1]
3156	$A_6 + A_5 + A_3 + A_2 + A_1$	[1]
3157	$A_6 + A_5 + A_3 + 3A_1$	[2]
3158	$A_6 + A_5 + 3A_2$	empty
3159	$A_6 + A_5 + 2A_2 + 2A_1$	[1]
3160	$A_6 + A_5 + A_2 + 4A_1$	empty
3161	$A_6 + 2A_4 + A_3$	[1]
3162	$A_6 + 2A_4 + A_2 + A_1$	[1]
3163	$A_6 + 2A_4 + 3A_1$	[1]
3164	$A_6 + A_4 + 2A_3 + A_1$	[1]
3165	$A_6 + A_4 + A_3 + 2A_2$	[1]
3166	$A_6 + A_4 + A_3 + A_2 + 2A_1$	[1]
3167	$A_6 + A_4 + A_3 + 4A_1$	empty
3168	$A_6 + A_4 + 3A_2 + A_1$	[1]
3169	$A_6 + A_4 + 2A_2 + 3A_1$	[1]
3170	$A_6 + 3A_3 + A_2$	[1]
3171	$A_6 + 3A_3 + 2A_1$	[2]
3172	$A_6 + 2A_3 + 2A_2 + A_1$	[1]
3173	$A_6 + 2A_3 + A_2 + 3A_1$	empty
3174	$A_6 + A_3 + 4A_2$	empty
3175	$A_6 + A_3 + 3A_2 + 2A_1$	[1]
3176	$A_6 + 5A_2 + A_1$	empty
3177	$3A_5 + A_2$	[3]
3178	$3A_5 + 2A_1$	[2] , [6]
3179	$2A_5 + A_4 + A_3$	[1] , [2]
3180	$2A_5 + A_4 + A_2 + A_1$	[1]
3181	$2A_5 + A_4 + 3A_1$	[2]
3182	$2A_5 + 2A_3 + A_1$	[2]
3183	$2A_5 + A_3 + 2A_2$	[3] , [6]
3184	$2A_5 + A_3 + A_2 + 2A_1$	[2]
3185	$2A_5 + A_3 + 4A_1$	[2, 2]
3186	$2A_5 + 3A_2 + A_1$	[3]
3187	$2A_5 + 2A_2 + 3A_1$	[6]
3188	$A_5 + 3A_4$	[1]
3189	$A_5 + 2A_4 + A_3 + A_1$	[1]
3190	$A_5 + 2A_4 + 2A_2$	[1]
3191	$A_5 + 2A_4 + A_2 + 2A_1$	[1]
3192	$A_5 + 2A_4 + 4A_1$	empty
3193	$A_5 + A_4 + 2A_3 + A_2$	[1]
3194	$A_5 + A_4 + 2A_3 + 2A_1$	[2]
3195	$A_5 + A_4 + A_3 + 2A_2 + A_1$	[1]
3196	$A_5 + A_4 + A_3 + A_2 + 3A_1$	[2]
3197	$A_5 + A_4 + 4A_2$	[3]
3198	$A_5 + A_4 + 3A_2 + 2A_1$	empty
3199	$A_5 + 4A_3$	empty
3200	$A_5 + 3A_3 + A_2 + A_1$	[2]
3201	$A_5 + 3A_3 + 3A_1$	[2, 2]
3202	$A_5 + 2A_3 + 3A_2$	empty
3203	$A_5 + 2A_3 + 2A_2 + 2A_1$	[2]
3204	$A_5 + A_3 + 4A_2 + A_1$	[3]
3205	$A_5 + 6A_2$	[3, 3]
3206	$4A_4 + A_1$	[5]

Table 1 (rank 17 - rank 18)

3207	$3\,A_4 + A_3 + A_2$	empty
3208	$3\,A_4 + A_3 + 2\,A_1$	[1]
3209	$3\,A_4 + 2\,A_2 + A_1$	empty
3210	$3\,A_4 + A_2 + 3\,A_1$	[1]
3211	$2\,A_4 + 3\,A_3$	empty
3212	$2\,A_4 + 2\,A_3 + A_2 + A_1$	[1]
3213	$2\,A_4 + 2\,A_3 + 3\,A_1$	empty
3214	$2\,A_4 + A_3 + 3\,A_2$	[1]
3215	$2\,A_4 + A_3 + 2\,A_2 + 2\,A_1$	[1]
3216	$2\,A_4 + 4\,A_2 + A_1$	empty
3217	$A_4 + 4\,A_3 + A_1$	empty
3218	$A_4 + 3\,A_3 + 2\,A_2$	[1]
3219	$A_4 + 3\,A_3 + A_2 + 2\,A_1$	[2]
3220	$A_4 + 2\,A_3 + 3\,A_2 + A_1$	[1]
3221	$A_4 + A_3 + 5\,A_2$	empty
3222	$5\,A_3 + A_2$	[4]
3223	$5\,A_3 + 2\,A_1$	[4, 2]
3224	$4\,A_3 + 2\,A_2 + A_1$	empty
3225	$3\,A_3 + 4\,A_2$	empty

rank 18

3226	$2\,E_8 + A_2$	[1]
3227	$2\,E_8 + 2\,A_1$	[1]
3228	$E_8 + E_7 + A_3$	[1]
3229	$E_8 + E_7 + A_2 + A_1$	[1]
3230	$E_8 + E_6 + D_4$	[1]
3231	$E_8 + E_6 + A_4$	[1]
3232	$E_8 + E_6 + A_3 + A_1$	[1]
3233	$E_8 + E_6 + 2\,A_2$	empty
3234	$E_8 + D_{10}$	[1]
3235	$E_8 + D_9 + A_1$	[1]
3236	$E_8 + D_8 + A_2$	empty
3237	$E_8 + D_8 + 2\,A_1$	empty
3238	$E_8 + D_7 + A_3$	empty
3239	$E_8 + D_7 + A_2 + A_1$	[1]
3240	$E_8 + D_6 + D_4$	empty
3241	$E_8 + D_6 + A_4$	[1]
3242	$E_8 + D_6 + A_3 + A_1$	empty
3243	$E_8 + D_6 + 2\,A_2$	[1]
3244	$E_8 + 2\,D_5$	[1]
3245	$E_8 + D_5 + A_5$	[1]
3246	$E_8 + D_5 + A_4 + A_1$	[1]
3247	$E_8 + D_5 + A_3 + A_2$	empty
3248	$E_8 + D_4 + A_6$	empty
3249	$E_8 + D_4 + A_5 + A_1$	empty
3250	$E_8 + D_4 + A_4 + A_2$	empty
3251	$E_8 + D_4 + 2\,A_3$	empty
3252	$E_8 + A_{10}$	[1]
3253	$E_8 + A_9 + A_1$	[1]
3254	$E_8 + A_8 + A_2$	[1]
3255	$E_8 + A_8 + 2\,A_1$	[1]
3256	$E_8 + A_7 + A_3$	empty
3257	$E_8 + A_7 + A_2 + A_1$	[1]
3258	$E_8 + A_7 + 3\,A_1$	empty
3259	$E_8 + A_6 + A_4$	[1]
3260	$E_8 + A_6 + A_3 + A_1$	[1]
3261	$E_8 + A_6 + 2\,A_2$	[1]
3262	$E_8 + A_6 + A_2 + 2\,A_1$	[1]
3263	$E_8 + 2\,A_5$	[1]
3264	$E_8 + A_5 + A_4 + A_1$	[1]
3265	$E_8 + A_5 + A_3 + A_2$	[1]
3266	$E_8 + A_5 + A_3 + 2\,A_1$	empty
3267	$E_8 + A_5 + 2\,A_2 + A_1$	empty
3268	$E_8 + 2\,A_4 + A_2$	empty
3269	$E_8 + 2\,A_4 + 2\,A_1$	[1]
3270	$E_8 + A_4 + 2\,A_3$	empty
3271	$E_8 + A_4 + A_3 + A_2 + A_1$	[1]
3272	$E_8 + A_4 + 3\,A_2$	empty
3273	$E_8 + 3\,A_3 + A_1$	empty
3274	$E_8 + 2\,A_3 + 2\,A_2$	[1]
3275	$2\,E_7 + D_4$	[2]
3276	$2\,E_7 + A_4$	[1]
3277	$2\,E_7 + A_3 + A_1$	[2]
3278	$2\,E_7 + 2\,A_2$	[1]
3279	$E_7 + E_6 + D_5$	[1]
3280	$E_7 + E_6 + A_5$	[1]
3281	$E_7 + E_6 + A_4 + A_1$	[1]
3282	$E_7 + E_6 + A_3 + A_2$	[1]
3283	$E_7 + D_{11}$	[1]
3284	$E_7 + D_{10} + A_1$	[2]
3285	$E_7 + D_9 + A_2$	[1]
3286	$E_7 + D_9 + 2\,A_1$	empty
3287	$E_7 + D_8 + A_3$	empty
3288	$E_7 + D_8 + A_2 + A_1$	[2]
3289	$E_7 + D_7 + D_4$	empty
3290	$E_7 + D_7 + A_4$	[1]
3291	$E_7 + D_7 + A_3 + A_1$	[2]
3292	$E_7 + D_7 + 2\,A_2$	empty
3293	$E_7 + D_6 + D_5$	[2]
3294	$E_7 + D_6 + A_5$	[2]
3295	$E_7 + D_6 + A_4 + A_1$	empty
3296	$E_7 + D_6 + A_3 + A_2$	[2]
3297	$E_7 + D_5 + A_6$	[1]
3298	$E_7 + D_5 + A_5 + A_1$	[2]
3299	$E_7 + D_5 + A_4 + A_2$	[1]
3300	$E_7 + D_5 + 2\,A_3$	empty
3301	$E_7 + D_4 + A_7$	empty
3302	$E_7 + D_4 + A_6 + A_1$	empty
3303	$E_7 + D_4 + A_5 + A_2$	empty
3304	$E_7 + D_4 + A_4 + A_3$	empty
3305	$E_7 + A_{11}$	[1]
3306	$E_7 + A_{10} + A_1$	[1]
3307	$E_7 + A_9 + A_2$	[1] , [2]
3308	$E_7 + A_9 + 2\,A_1$	[2]
3309	$E_7 + A_8 + A_3$	[1]
3310	$E_7 + A_8 + A_2 + A_1$	[1]
3311	$E_7 + A_8 + 3\,A_1$	empty
3312	$E_7 + A_7 + A_4$	[1]
3313	$E_7 + A_7 + A_3 + A_1$	[2]
3314	$E_7 + A_7 + 2\,A_2$	[1]
3315	$E_7 + A_7 + A_2 + 2\,A_1$	[2]
3316	$E_7 + A_6 + A_5$	[1]
3317	$E_7 + A_6 + A_4 + A_1$	[1]
3318	$E_7 + A_6 + A_3 + A_2$	[1]
3319	$E_7 + A_6 + A_3 + 2\,A_1$	empty
3320	$E_7 + A_6 + 2\,A_2 + A_1$	[1]
3321	$E_7 + 2\,A_5 + A_1$	empty
3322	$E_7 + A_5 + A_4 + A_2$	[1]
3323	$E_7 + A_5 + A_4 + 2\,A_1$	[2]
3324	$E_7 + A_5 + 2\,A_3$	[2]

Table 1 (rank 18)

3325	$E_7 + A_5 + A_3 + A_2 + A_1$	[2]
3326	$E_7 + A_5 + 3A_2$	empty
3327	$E_7 + 2A_4 + A_3$	empty
3328	$E_7 + 2A_4 + A_2 + A_1$	empty
3329	$E_7 + A_4 + 2A_3 + A_1$	[2]
3330	$E_7 + A_4 + A_3 + 2A_2$	[1]
3331	$E_7 + 3A_3 + A_2$	empty
3332	$3E_6$	[3]
3333	$2E_6 + D_6$	[1]
3334	$2E_6 + A_6$	[1]
3335	$2E_6 + A_5 + A_1$	[3]
3336	$2E_6 + A_4 + A_2$	empty
3337	$2E_6 + 2A_3$	[1]
3338	$E_6 + D_{12}$	[1]
3339	$E_6 + D_{11} + A_1$	[1]
3340	$E_6 + D_{10} + A_2$	empty
3341	$E_6 + D_{10} + 2A_1$	empty
3342	$E_6 + D_9 + A_3$	[1]
3343	$E_6 + D_9 + A_2 + A_1$	[1]
3344	$E_6 + D_8 + D_4$	empty
3345	$E_6 + D_8 + A_4$	[1]
3346	$E_6 + D_8 + A_3 + A_1$	empty
3347	$E_6 + D_8 + 2A_2$	empty
3348	$E_6 + D_7 + D_5$	[1]
3349	$E_6 + D_7 + A_5$	empty
3350	$E_6 + D_7 + A_4 + A_1$	[1]
3351	$E_6 + D_7 + A_3 + A_2$	empty
3352	$E_6 + 2D_6$	empty
3353	$E_6 + D_6 + A_6$	[1]
3354	$E_6 + D_6 + A_5 + A_1$	empty
3355	$E_6 + D_6 + A_4 + A_2$	[1]
3356	$E_6 + D_6 + 2A_3$	empty
3357	$E_6 + D_5 + A_7$	[1]
3358	$E_6 + D_5 + A_6 + A_1$	[1]
3359	$E_6 + D_5 + A_5 + A_2$	empty
3360	$E_6 + D_5 + A_4 + A_3$	[1]
3361	$E_6 + D_4 + A_8$	empty
3362	$E_6 + D_4 + A_7 + A_1$	empty
3363	$E_6 + D_4 + A_6 + A_2$	empty
3364	$E_6 + D_4 + A_5 + A_3$	empty
3365	$E_6 + D_4 + 2A_4$	empty
3366	$E_6 + A_{12}$	[1]
3367	$E_6 + A_{11} + A_1$	[1] , [3]
3368	$E_6 + A_{10} + A_2$	[1]
3369	$E_6 + A_{10} + 2A_1$	[1]
3370	$E_6 + A_9 + A_3$	[1]
3371	$E_6 + A_9 + A_2 + A_1$	[1]
3372	$E_6 + A_9 + 3A_1$	empty
3373	$E_6 + A_8 + A_4$	[1]
3374	$E_6 + A_8 + A_3 + A_1$	[1]
3375	$E_6 + A_8 + 2A_2$	[3]
3376	$E_6 + A_8 + A_2 + 2A_1$	[3]
3377	$E_6 + A_7 + A_5$	[1]
3378	$E_6 + A_7 + A_4 + A_1$	[1]
3379	$E_6 + A_7 + A_3 + A_2$	empty
3380	$E_6 + A_7 + A_3 + 2A_1$	empty
3381	$E_6 + A_7 + 2A_2 + A_1$	empty
3382	$E_6 + 2A_6$	empty
3383	$E_6 + A_6 + A_5 + A_1$	[1]
3384	$E_6 + A_6 + A_4 + A_2$	[1]
3385	$E_6 + A_6 + A_4 + 2A_1$	[1]
3386	$E_6 + A_6 + 2A_3$	empty
3387	$E_6 + A_6 + A_3 + A_2 + A_1$	[1]
3388	$E_6 + A_6 + 3A_2$	empty
3389	$E_6 + 2A_5 + A_2$	[3]
3390	$E_6 + 2A_5 + 2A_1$	empty
3391	$E_6 + A_5 + A_4 + A_3$	[1]
3392	$E_6 + A_5 + A_4 + A_2 + A_1$	empty
3393	$E_6 + A_5 + 2A_3 + A_1$	empty
3394	$E_6 + A_5 + A_3 + 2A_2$	[3]
3395	$E_6 + 3A_4$	empty
3396	$E_6 + 2A_4 + A_3 + A_1$	[1]
3397	$E_6 + 2A_4 + 2A_2$	empty
3398	$E_6 + A_4 + 2A_3 + A_2$	empty
3399	$E_6 + 4A_3$	empty
3400	D_{18}	[1]
3401	$D_{17} + A_1$	[1]
3402	$D_{16} + A_2$	[2]
3403	$D_{16} + 2A_1$	[2]
3404	$D_{15} + A_3$	empty
3405	$D_{15} + A_2 + A_1$	[1]
3406	$D_{15} + 3A_1$	empty
3407	$D_{14} + D_4$	empty
3408	$D_{14} + A_4$	[1]
3409	$D_{14} + A_3 + A_1$	[2]
3410	$D_{14} + 2A_2$	[1]
3411	$D_{14} + A_2 + 2A_1$	[2]
3412	$D_{14} + 4A_1$	empty
3413	$D_{13} + D_5$	[1]
3414	$D_{13} + D_4 + A_1$	empty
3415	$D_{13} + A_5$	[1]
3416	$D_{13} + A_4 + A_1$	[1]
3417	$D_{13} + A_3 + A_2$	empty
3418	$D_{13} + A_3 + 2A_1$	empty
3419	$D_{13} + 2A_2 + A_1$	empty
3420	$D_{13} + A_2 + 3A_1$	empty
3421	$D_{12} + D_6$	[2]
3422	$D_{12} + D_5 + A_1$	[2]
3423	$D_{12} + D_4 + A_2$	empty
3424	$D_{12} + D_4 + 2A_1$	empty
3425	$D_{12} + A_6$	empty
3426	$D_{12} + A_5 + A_1$	empty
3427	$D_{12} + A_4 + A_2$	empty
3428	$D_{12} + A_4 + 2A_1$	[2]
3429	$D_{12} + 2A_3$	empty
3430	$D_{12} + A_3 + A_2 + A_1$	[2]
3431	$D_{12} + A_3 + 3A_1$	empty
3432	$D_{12} + 3A_2$	empty
3433	$D_{12} + 2A_2 + 2A_1$	[2]
3434	$D_{11} + D_7$	empty
3435	$D_{11} + D_6 + A_1$	empty
3436	$D_{11} + D_5 + A_2$	empty
3437	$D_{11} + D_5 + 2A_1$	empty
3438	$D_{11} + D_4 + A_3$	empty
3439	$D_{11} + D_4 + A_2 + A_1$	empty
3440	$D_{11} + A_7$	empty
3441	$D_{11} + A_6 + A_1$	[1]
3442	$D_{11} + A_5 + A_2$	[1]
3443	$D_{11} + A_5 + 2A_1$	empty
3444	$D_{11} + A_4 + A_3$	empty

Table 1 (rank 18)

3445	$D_{11} + A_4 + A_2 + A_1$	[1]
3446	$D_{11} + A_4 + 3A_1$	empty
3447	$D_{11} + 2A_3 + A_1$	empty
3448	$D_{11} + A_3 + 2A_2$	[1]
3449	$D_{11} + A_3 + A_2 + 2A_1$	empty
3450	$D_{11} + 3A_2 + A_1$	empty
3451	$D_{10} + D_8$	empty
3452	$D_{10} + D_7 + A_1$	[2]
3453	$D_{10} + D_6 + A_2$	[2]
3454	$D_{10} + D_6 + 2A_1$	empty
3455	$D_{10} + D_5 + A_3$	empty
3456	$D_{10} + D_5 + A_2 + A_1$	[2]
3457	$D_{10} + 2D_4$	empty
3458	$D_{10} + D_4 + A_4$	empty
3459	$D_{10} + D_4 + A_3 + A_1$	empty
3460	$D_{10} + D_4 + 2A_2$	empty
3461	$D_{10} + A_8$	[1]
3462	$D_{10} + A_7 + A_1$	empty
3463	$D_{10} + A_6 + A_2$	[1]
3464	$D_{10} + A_6 + 2A_1$	empty
3465	$D_{10} + A_5 + A_3$	[2]
3466	$D_{10} + A_5 + A_2 + A_1$	empty
3467	$D_{10} + A_5 + 3A_1$	[2, 2]
3468	$D_{10} + 2A_4$	[1]
3469	$D_{10} + A_4 + A_3 + A_1$	[2]
3470	$D_{10} + A_4 + 2A_2$	empty
3471	$D_{10} + A_4 + A_2 + 2A_1$	empty
3472	$D_{10} + 2A_3 + A_2$	empty
3473	$D_{10} + 2A_3 + 2A_1$	[2, 2]
3474	$D_{10} + A_3 + 2A_2 + A_1$	empty
3475	$D_{10} + 4A_2$	empty
3476	$2D_9$	[1]
3477	$D_9 + D_8 + A_1$	empty
3478	$D_9 + D_7 + A_2$	empty
3479	$D_9 + D_7 + 2A_1$	empty
3480	$D_9 + D_6 + A_3$	empty
3481	$D_9 + D_6 + A_2 + A_1$	empty
3482	$D_9 + D_5 + D_4$	empty
3483	$D_9 + D_5 + A_4$	[1]
3484	$D_9 + D_5 + A_3 + A_1$	empty
3485	$D_9 + D_5 + 2A_2$	empty
3486	$D_9 + D_4 + A_5$	empty
3487	$D_9 + D_4 + A_4 + A_1$	empty
3488	$D_9 + D_4 + A_3 + A_2$	empty
3489	$D_9 + A_9$	[1]
3490	$D_9 + A_8 + A_1$	[1]
3491	$D_9 + A_7 + A_2$	empty
3492	$D_9 + A_7 + 2A_1$	[2]
3493	$D_9 + A_6 + A_3$	empty
3494	$D_9 + A_6 + A_2 + A_1$	[1]
3495	$D_9 + A_6 + 3A_1$	empty
3496	$D_9 + A_5 + A_4$	[1]
3497	$D_9 + A_5 + A_3 + A_1$	[2]
3498	$D_9 + A_5 + 2A_2$	empty
3499	$D_9 + A_5 + A_2 + 2A_1$	empty
3500	$D_9 + 2A_4 + A_1$	empty
3501	$D_9 + A_4 + A_3 + A_2$	empty
3502	$D_9 + A_4 + A_3 + 2A_1$	empty
3503	$D_9 + A_4 + 2A_2 + A_1$	[1]
3504	$D_9 + 3A_3$	empty
3505	$D_9 + 2A_3 + A_2 + A_1$	empty
3506	$D_9 + A_3 + 3A_2$	empty
3507	$2D_8 + A_2$	empty
3508	$2D_8 + 2A_1$	[2, 2]
3509	$D_8 + D_7 + A_3$	empty
3510	$D_8 + D_7 + A_2 + A_1$	empty
3511	$D_8 + D_6 + D_4$	empty
3512	$D_8 + D_6 + A_4$	empty
3513	$D_8 + D_6 + A_3 + A_1$	[2, 2]
3514	$D_8 + D_6 + 2A_2$	empty
3515	$D_8 + 2D_5$	[2]
3516	$D_8 + D_5 + A_5$	empty
3517	$D_8 + D_5 + A_4 + A_1$	empty
3518	$D_8 + D_5 + A_3 + A_2$	empty
3519	$D_8 + D_4 + A_6$	empty
3520	$D_8 + D_4 + A_5 + A_1$	empty
3521	$D_8 + D_4 + A_4 + A_2$	empty
3522	$D_8 + D_4 + 2A_3$	empty
3523	$D_8 + A_{10}$	empty
3524	$D_8 + A_9 + A_1$	[2]
3525	$D_8 + A_8 + A_2$	empty
3526	$D_8 + A_8 + 2A_1$	empty
3527	$D_8 + A_7 + A_3$	empty
3528	$D_8 + A_7 + A_2 + A_1$	[2]
3529	$D_8 + A_7 + 3A_1$	empty
3530	$D_8 + A_6 + A_4$	empty
3531	$D_8 + A_6 + A_3 + A_1$	empty
3532	$D_8 + A_6 + 2A_2$	[1]
3533	$D_8 + A_6 + A_2 + 2A_1$	empty
3534	$D_8 + 2A_5$	[2]
3535	$D_8 + A_5 + A_4 + A_1$	[2]
3536	$D_8 + A_5 + A_3 + A_2$	empty
3537	$D_8 + A_5 + A_3 + 2A_1$	[2, 2]
3538	$D_8 + A_5 + 2A_2 + A_1$	empty
3539	$D_8 + 2A_4 + A_2$	empty
3540	$D_8 + 2A_4 + 2A_1$	empty
3541	$D_8 + A_4 + 2A_3$	empty
3542	$D_8 + A_4 + A_3 + A_2 + A_1$	empty
3543	$D_8 + A_4 + 3A_2$	empty
3544	$D_8 + 3A_3 + A_1$	empty
3545	$D_8 + 2A_3 + 2A_2$	[2]
3546	$2D_7 + D_4$	empty
3547	$2D_7 + A_4$	empty
3548	$2D_7 + A_3 + A_1$	empty
3549	$2D_7 + 2A_2$	[1]
3550	$D_7 + D_6 + D_5$	empty
3551	$D_7 + D_6 + A_5$	[2]
3552	$D_7 + D_6 + A_4 + A_1$	empty
3553	$D_7 + D_6 + A_3 + A_2$	empty
3554	$D_7 + D_5 + A_6$	empty
3555	$D_7 + D_5 + A_5 + A_1$	[2]
3556	$D_7 + D_5 + A_4 + A_2$	empty
3557	$D_7 + D_5 + 2A_3$	empty
3558	$D_7 + D_4 + A_7$	empty
3559	$D_7 + D_4 + A_6 + A_1$	empty
3560	$D_7 + D_4 + A_5 + A_2$	empty
3561	$D_7 + D_4 + A_4 + A_3$	empty
3562	$D_7 + A_{11}$	[4]
3563	$D_7 + A_{10} + A_1$	[1]
3564	$D_7 + A_9 + A_2$	[1]

3565	$D_7 + A_9 + 2A_1$	[2]
3566	$D_7 + A_8 + A_3$	empty
3567	$D_7 + A_8 + A_2 + A_1$	empty
3568	$D_7 + A_8 + 3A_1$	empty
3569	$D_7 + A_7 + A_4$	empty
3570	$D_7 + A_7 + A_3 + A_1$	[4]
3571	$D_7 + A_7 + 2A_2$	empty
3572	$D_7 + A_7 + A_2 + 2A_1$	[2]
3573	$D_7 + A_6 + A_5$	[1]
3574	$D_7 + A_6 + A_4 + A_1$	[1]
3575	$D_7 + A_6 + A_3 + A_2$	[1]
3576	$D_7 + A_6 + A_3 + 2A_1$	empty
3577	$D_7 + A_6 + 2A_2 + A_1$	empty
3578	$D_7 + 2A_5 + A_1$	empty
3579	$D_7 + A_5 + A_4 + A_2$	empty
3580	$D_7 + A_5 + A_4 + 2A_1$	empty
3581	$D_7 + A_5 + 2A_3$	empty
3582	$D_7 + A_5 + A_3 + A_2 + A_1$	empty
3583	$D_7 + A_5 + 3A_2$	empty
3584	$D_7 + 2A_4 + A_3$	empty
3585	$D_7 + 2A_4 + A_2 + A_1$	[1]
3586	$D_7 + A_4 + 2A_3 + A_1$	empty
3587	$D_7 + A_4 + A_3 + 2A_2$	empty
3588	$D_7 + 3A_3 + A_2$	[4]
3589	$3D_6$	[2, 2]
3590	$2D_6 + A_6$	empty
3591	$2D_6 + A_5 + A_1$	empty
3592	$2D_6 + A_4 + A_2$	empty
3593	$2D_6 + 2A_3$	[2, 2]
3594	$D_6 + D_5 + A_7$	[2]
3595	$D_6 + D_5 + A_6 + A_1$	empty
3596	$D_6 + D_5 + A_5 + A_2$	[2]
3597	$D_6 + D_5 + A_4 + A_3$	empty
3598	$D_6 + D_4 + A_8$	empty
3599	$D_6 + D_4 + A_7 + A_1$	empty
3600	$D_6 + D_4 + A_6 + A_2$	empty
3601	$D_6 + D_4 + A_5 + A_3$	empty
3602	$D_6 + D_4 + 2A_4$	empty
3603	$D_6 + A_{12}$	[1]
3604	$D_6 + A_{11} + A_1$	[2]
3605	$D_6 + A_{10} + A_2$	[1]
3606	$D_6 + A_{10} + 2A_1$	empty
3607	$D_6 + A_9 + A_3$	[2]
3608	$D_6 + A_9 + A_2 + A_1$	[2]
3609	$D_6 + A_9 + 3A_1$	empty
3610	$D_6 + A_8 + A_4$	[1]
3611	$D_6 + A_8 + A_3 + A_1$	empty
3612	$D_6 + A_8 + 2A_2$	empty
3613	$D_6 + A_8 + A_2 + 2A_1$	empty
3614	$D_6 + A_7 + A_5$	empty
3615	$D_6 + A_7 + A_4 + A_1$	[2]
3616	$D_6 + A_7 + A_3 + A_2$	[2]
3617	$D_6 + A_7 + A_3 + 2A_1$	empty
3618	$D_6 + A_7 + 2A_2 + A_1$	[2]
3619	$D_6 + 2A_6$	[1]
3620	$D_6 + A_6 + A_5 + A_1$	empty
3621	$D_6 + A_6 + A_4 + A_2$	[1]
3622	$D_6 + A_6 + A_4 + 2A_1$	empty
3623	$D_6 + A_6 + 2A_3$	empty
3624	$D_6 + A_6 + A_3 + A_2 + A_1$	empty
3625	$D_6 + A_6 + 3A_2$	empty
3626	$D_6 + 2A_5 + A_2$	empty
3627	$D_6 + 2A_5 + 2A_1$	[2, 2]
3628	$D_6 + A_5 + A_4 + A_3$	[2]
3629	$D_6 + A_5 + A_4 + A_2 + A_1$	empty
3630	$D_6 + A_5 + 2A_3 + A_1$	[2, 2]
3631	$D_6 + A_5 + A_3 + 2A_2$	empty
3632	$D_6 + 3A_4$	empty
3633	$D_6 + 2A_4 + A_3 + A_1$	empty
3634	$D_6 + 2A_4 + 2A_2$	[1]
3635	$D_6 + A_4 + 2A_3 + A_2$	empty
3636	$D_6 + 4A_3$	empty
3637	$2D_5 + A_8$	[1]
3638	$2D_5 + A_7 + A_1$	[4]
3639	$2D_5 + A_6 + A_2$	empty
3640	$2D_5 + A_5 + A_3$	empty
3641	$2D_5 + 2A_4$	[1]
3642	$D_5 + D_4 + A_9$	empty
3643	$D_5 + D_4 + A_8 + A_1$	empty
3644	$D_5 + D_4 + A_7 + A_2$	empty
3645	$D_5 + D_4 + A_6 + A_3$	empty
3646	$D_5 + D_4 + A_5 + A_4$	empty
3647	$D_5 + A_{13}$	[1]
3648	$D_5 + A_{12} + A_1$	[1]
3649	$D_5 + A_{11} + A_2$	[2]
3650	$D_5 + A_{11} + 2A_1$	[4]
3651	$D_5 + A_{10} + A_3$	empty
3652	$D_5 + A_{10} + A_2 + A_1$	[1]
3653	$D_5 + A_{10} + 3A_1$	empty
3654	$D_5 + A_9 + A_4$	[1]
3655	$D_5 + A_9 + A_3 + A_1$	[2]
3656	$D_5 + A_9 + 2A_2$	[1]
3657	$D_5 + A_9 + A_2 + 2A_1$	[2]
3658	$D_5 + A_8 + A_5$	[1]
3659	$D_5 + A_8 + A_4 + A_1$	[1]
3660	$D_5 + A_8 + A_3 + A_2$	empty
3661	$D_5 + A_8 + A_3 + 2A_1$	empty
3662	$D_5 + A_8 + 2A_2 + A_1$	empty
3663	$D_5 + A_7 + A_6$	empty
3664	$D_5 + A_7 + A_5 + A_1$	empty
3665	$D_5 + A_7 + A_4 + A_2$	empty
3666	$D_5 + A_7 + A_4 + 2A_1$	[2]
3667	$D_5 + A_7 + 2A_3$	empty
3668	$D_5 + A_7 + A_3 + A_2 + A_1$	[4]
3669	$D_5 + A_7 + 3A_2$	empty
3670	$D_5 + 2A_6 + A_1$	[1]
3671	$D_5 + A_6 + A_5 + A_2$	[1]
3672	$D_5 + A_6 + A_5 + 2A_1$	empty
3673	$D_5 + A_6 + A_4 + A_3$	empty
3674	$D_5 + A_6 + A_4 + A_2 + A_1$	[1]
3675	$D_5 + A_6 + 2A_3 + A_1$	empty
3676	$D_5 + A_6 + A_3 + 2A_2$	[1]
3677	$D_5 + 2A_5 + A_3$	[2]
3678	$D_5 + 2A_5 + A_2 + A_1$	empty
3679	$D_5 + A_5 + 2A_4$	[1]
3680	$D_5 + A_5 + A_4 + A_3 + A_1$	[2]
3681	$D_5 + A_5 + A_4 + 2A_2$	empty
3682	$D_5 + A_5 + 2A_3 + A_2$	empty
3683	$D_5 + 3A_4 + A_1$	empty
3684	$D_5 + 2A_4 + A_3 + A_2$	empty

Table 1 (rank 18)

3685	$D_5 + A_4 + 3A_3$	empty
3686	$2D_4 + A_{10}$	empty
3687	$2D_4 + A_9 + A_1$	empty
3688	$2D_4 + A_8 + A_2$	empty
3689	$2D_4 + A_7 + A_3$	empty
3690	$2D_4 + A_6 + A_4$	empty
3691	$2D_4 + 2A_5$	empty
3692	$D_4 + A_{14}$	empty
3693	$D_4 + A_{13} + A_1$	empty
3694	$D_4 + A_{12} + A_2$	empty
3695	$D_4 + A_{12} + 2A_1$	empty
3696	$D_4 + A_{11} + A_3$	empty
3697	$D_4 + A_{11} + A_2 + A_1$	empty
3698	$D_4 + A_{11} + 3A_1$	empty
3699	$D_4 + A_{10} + A_4$	empty
3700	$D_4 + A_{10} + A_3 + A_1$	empty
3701	$D_4 + A_{10} + 2A_2$	empty
3702	$D_4 + A_{10} + A_2 + 2A_1$	empty
3703	$D_4 + A_9 + A_5$	empty
3704	$D_4 + A_9 + A_4 + A_1$	empty
3705	$D_4 + A_9 + A_3 + A_2$	empty
3706	$D_4 + A_9 + A_3 + 2A_1$	empty
3707	$D_4 + A_9 + 2A_2 + A_1$	empty
3708	$D_4 + A_8 + A_6$	empty
3709	$D_4 + A_8 + A_5 + A_1$	empty
3710	$D_4 + A_8 + A_4 + A_2$	empty
3711	$D_4 + A_8 + A_4 + 2A_1$	empty
3712	$D_4 + A_8 + 2A_3$	empty
3713	$D_4 + A_8 + A_3 + A_2 + A_1$	empty
3714	$D_4 + A_8 + 3A_2$	empty
3715	$D_4 + 2A_7$	empty
3716	$D_4 + A_7 + A_6 + A_1$	empty
3717	$D_4 + A_7 + A_5 + A_2$	empty
3718	$D_4 + A_7 + A_5 + 2A_1$	empty
3719	$D_4 + A_7 + A_4 + A_3$	empty
3720	$D_4 + A_7 + A_4 + A_2 + A_1$	empty
3721	$D_4 + A_7 + 2A_3 + A_1$	empty
3722	$D_4 + A_7 + A_3 + 2A_2$	empty
3723	$D_4 + 2A_6 + A_2$	empty
3724	$D_4 + 2A_6 + 2A_1$	empty
3725	$D_4 + A_6 + A_5 + A_3$	empty
3726	$D_4 + A_6 + A_5 + A_2 + A_1$	empty
3727	$D_4 + A_6 + 2A_4$	empty
3728	$D_4 + A_6 + A_4 + A_3 + A_1$	empty
3729	$D_4 + A_6 + A_4 + 2A_2$	empty
3730	$D_4 + A_6 + 2A_3 + A_2$	empty
3731	$D_4 + 2A_5 + A_4$	empty
3732	$D_4 + 2A_5 + A_3 + A_1$	empty
3733	$D_4 + 2A_5 + 2A_2$	empty
3734	$D_4 + A_5 + 2A_4 + A_1$	empty
3735	$D_4 + A_5 + A_4 + A_3 + A_2$	empty
3736	$D_4 + A_5 + 3A_3$	empty
3737	$D_4 + 3A_4 + A_2$	empty
3738	$D_4 + 2A_4 + 2A_3$	empty
3739	A_{18}	[1]
3740	$A_{17} + A_1$	[1] , [3]
3741	$A_{16} + A_2$	[1]
3742	$A_{16} + 2A_1$	[1]
3743	$A_{15} + A_3$	[4]
3744	$A_{15} + A_2 + A_1$	[1] , [2]
3745	$A_{15} + 3A_1$	[4]
3746	$A_{14} + A_4$	[1]
3747	$A_{14} + A_3 + A_1$	[1]
3748	$A_{14} + 2A_2$	[3]
3749	$A_{14} + A_2 + 2A_1$	[1] , [3]
3750	$A_{14} + 4A_1$	empty
3751	$A_{13} + A_5$	[1]
3752	$A_{13} + A_4 + A_1$	[1] , [2]
3753	$A_{13} + A_3 + A_2$	[1]
3754	$A_{13} + A_3 + 2A_1$	[2]
3755	$A_{13} + 2A_2 + A_1$	[1] , [2]
3756	$A_{13} + A_2 + 3A_1$	[2]
3757	$A_{13} + 5A_1$	empty
3758	$A_{12} + A_6$	[1]
3759	$A_{12} + A_5 + A_1$	[1]
3760	$A_{12} + A_4 + A_2$	[1]
3761	$A_{12} + A_4 + 2A_1$	[1]
3762	$A_{12} + 2A_3$	empty
3763	$A_{12} + A_3 + A_2 + A_1$	[1]
3764	$A_{12} + A_3 + 3A_1$	empty
3765	$A_{12} + 3A_2$	empty
3766	$A_{12} + 2A_2 + 2A_1$	[1]
3767	$A_{12} + A_2 + 4A_1$	empty
3768	$A_{11} + A_7$	empty
3769	$A_{11} + A_6 + A_1$	[1]
3770	$A_{11} + A_5 + A_2$	[3]
3771	$A_{11} + A_5 + 2A_1$	[2] , [6]
3772	$A_{11} + A_4 + A_3$	empty
3773	$A_{11} + A_4 + A_2 + A_1$	[1]
3774	$A_{11} + A_4 + 3A_1$	[2]
3775	$A_{11} + 2A_3 + A_1$	[4]
3776	$A_{11} + A_3 + 2A_2$	[3] , [6]
3777	$A_{11} + A_3 + A_2 + 2A_1$	[2] , [4]
3778	$A_{11} + A_3 + 4A_1$	empty
3779	$A_{11} + 3A_2 + A_1$	[3]
3780	$A_{11} + 2A_2 + 3A_1$	[6]
3781	$A_{10} + A_8$	[1]
3782	$A_{10} + A_7 + A_1$	[1]
3783	$A_{10} + A_6 + A_2$	[1]
3784	$A_{10} + A_6 + 2A_1$	[1]
3785	$A_{10} + A_5 + A_3$	[1]
3786	$A_{10} + A_5 + A_2 + A_1$	[1]
3787	$A_{10} + A_5 + 3A_1$	empty
3788	$A_{10} + 2A_4$	[1]
3789	$A_{10} + A_4 + A_3 + A_1$	[1]
3790	$A_{10} + A_4 + 2A_2$	[1]
3791	$A_{10} + A_4 + A_2 + 2A_1$	[1]
3792	$A_{10} + A_4 + 4A_1$	empty
3793	$A_{10} + 2A_3 + A_2$	[1]
3794	$A_{10} + 2A_3 + 2A_1$	empty
3795	$A_{10} + A_3 + 2A_2 + A_1$	[1]
3796	$A_{10} + A_3 + A_2 + 3A_1$	empty
3797	$A_{10} + 4A_2$	empty
3798	$A_{10} + 3A_2 + 2A_1$	empty
3799	$2A_9$	[1] , [5]
3800	$A_9 + A_8 + A_1$	[1]
3801	$A_9 + A_7 + A_2$	[1]
3802	$A_9 + A_7 + 2A_1$	empty
3803	$A_9 + A_6 + A_3$	[1]
3804	$A_9 + A_6 + A_2 + A_1$	[1]

Table 1 (rank 18)

3805	$A_9 + A_6 + 3A_1$	[2]
3806	$A_9 + A_5 + A_4$	[1] , [2]
3807	$A_9 + A_5 + A_3 + A_1$	[2]
3808	$A_9 + A_5 + 2A_2$	empty
3809	$A_9 + A_5 + A_2 + 2A_1$	[2]
3810	$A_9 + A_5 + 4A_1$	empty
3811	$A_9 + 2A_4 + A_1$	[5]
3812	$A_9 + A_4 + A_3 + A_2$	empty
3813	$A_9 + A_4 + A_3 + 2A_1$	[2]
3814	$A_9 + A_4 + 2A_2 + A_1$	empty
3815	$A_9 + A_4 + A_2 + 3A_1$	[2]
3816	$A_9 + 3A_3$	empty
3817	$A_9 + 2A_3 + A_2 + A_1$	[2]
3818	$A_9 + 2A_3 + 3A_1$	empty
3819	$A_9 + A_3 + 3A_2$	empty
3820	$A_9 + A_3 + 2A_2 + 2A_1$	[2]
3821	$A_9 + 4A_2 + A_1$	empty
3822	$2A_8 + A_2$	empty
3823	$2A_8 + 2A_1$	[1] , [3]
3824	$A_8 + A_7 + A_3$	empty
3825	$A_8 + A_7 + A_2 + A_1$	[1]
3826	$A_8 + A_7 + 3A_1$	empty
3827	$A_8 + A_6 + A_4$	[1]
3828	$A_8 + A_6 + A_3 + A_1$	[1]
3829	$A_8 + A_6 + 2A_2$	empty
3830	$A_8 + A_6 + A_2 + 2A_1$	[1]
3831	$A_8 + A_6 + 4A_1$	empty
3832	$A_8 + 2A_5$	empty
3833	$A_8 + A_5 + A_4 + A_1$	[1]
3834	$A_8 + A_5 + A_3 + A_2$	[3]
3835	$A_8 + A_5 + A_3 + 2A_1$	empty
3836	$A_8 + A_5 + 2A_2 + A_1$	[3]
3837	$A_8 + A_5 + A_2 + 3A_1$	empty
3838	$A_8 + 2A_4 + A_2$	empty
3839	$A_8 + 2A_4 + 2A_1$	[1]
3840	$A_8 + A_4 + 2A_3$	empty
3841	$A_8 + A_4 + A_3 + A_2 + A_1$	[1]
3842	$A_8 + A_4 + A_3 + 3A_1$	empty
3843	$A_8 + A_4 + 3A_2$	[3]
3844	$A_8 + A_4 + 2A_2 + 2A_1$	empty
3845	$A_8 + 3A_3 + A_1$	empty
3846	$A_8 + 2A_3 + 2A_2$	empty
3847	$A_8 + 2A_3 + A_2 + 2A_1$	empty
3848	$A_8 + A_3 + 3A_2 + A_1$	[3]
3849	$A_8 + 5A_2$	empty
3850	$2A_7 + A_4$	empty
3851	$2A_7 + A_3 + A_1$	[8]
3852	$2A_7 + 2A_2$	[1] , [2]
3853	$2A_7 + A_2 + 2A_1$	empty
3854	$2A_7 + 4A_1$	[4, 2]
3855	$A_7 + A_6 + A_5$	[1]
3856	$A_7 + A_6 + A_4 + A_1$	[1]
3857	$A_7 + A_6 + A_3 + A_2$	[1]
3858	$A_7 + A_6 + A_3 + 2A_1$	[2]
3859	$A_7 + A_6 + 2A_2 + A_1$	[1]
3860	$A_7 + A_6 + A_2 + 3A_1$	empty
3861	$A_7 + 2A_5 + A_1$	[2]
3862	$A_7 + A_5 + A_4 + A_2$	[1]
3863	$A_7 + A_5 + A_4 + 2A_1$	[2]
3864	$A_7 + A_5 + 2A_3$	empty
3865	$A_7 + A_5 + A_3 + A_2 + A_1$	[2]
3866	$A_7 + A_5 + A_3 + 3A_1$	[2, 2]
3867	$A_7 + A_5 + 3A_2$	empty
3868	$A_7 + A_5 + 2A_2 + 2A_1$	empty
3869	$A_7 + 2A_4 + A_3$	empty
3870	$A_7 + 2A_4 + A_2 + A_1$	empty
3871	$A_7 + 2A_4 + 3A_1$	empty
3872	$A_7 + A_4 + 2A_3 + A_1$	empty
3873	$A_7 + A_4 + A_3 + 2A_2$	[1]
3874	$A_7 + A_4 + A_3 + A_2 + 2A_1$	[2]
3875	$A_7 + A_4 + 3A_2 + A_1$	empty
3876	$A_7 + 3A_3 + A_2$	[4]
3877	$A_7 + 3A_3 + 2A_1$	[4, 2]
3878	$A_7 + 2A_3 + 2A_2 + A_1$	empty
3879	$A_7 + A_3 + 4A_2$	empty
3880	$3A_6$	[7]
3881	$2A_6 + A_5 + A_1$	empty
3882	$2A_6 + A_4 + A_2$	[1]
3883	$2A_6 + A_4 + 2A_1$	empty
3884	$2A_6 + 2A_3$	[1]
3885	$2A_6 + A_3 + A_2 + A_1$	empty
3886	$2A_6 + A_3 + 3A_1$	empty
3887	$2A_6 + 3A_2$	empty
3888	$2A_6 + 2A_2 + 2A_1$	[1]
3889	$A_6 + 2A_5 + A_2$	empty
3890	$A_6 + 2A_5 + 2A_1$	[2]
3891	$A_6 + A_5 + A_4 + A_3$	[1]
3892	$A_6 + A_5 + A_4 + A_2 + A_1$	[1]
3893	$A_6 + A_5 + A_4 + 3A_1$	empty
3894	$A_6 + A_5 + 2A_3 + A_1$	[2]
3895	$A_6 + A_5 + A_3 + 2A_2$	empty
3896	$A_6 + A_5 + A_3 + A_2 + 2A_1$	empty
3897	$A_6 + A_5 + 3A_2 + A_1$	empty
3898	$A_6 + 3A_4$	empty
3899	$A_6 + 2A_4 + A_3 + A_1$	[1]
3900	$A_6 + 2A_4 + 2A_2$	empty
3901	$A_6 + 2A_4 + A_2 + 2A_1$	[1]
3902	$A_6 + A_4 + 2A_3 + A_2$	[1]
3903	$A_6 + A_4 + 2A_3 + 2A_1$	empty
3904	$A_6 + A_4 + A_3 + 2A_2 + A_1$	[1]
3905	$A_6 + A_4 + 4A_2$	empty
3906	$A_6 + 4A_3$	empty
3907	$A_6 + 3A_3 + A_2 + A_1$	empty
3908	$A_6 + 2A_3 + 3A_2$	empty
3909	$3A_5 + A_3$	[6]
3910	$3A_5 + A_2 + A_1$	empty
3911	$3A_5 + 3A_1$	[6, 2]
3912	$2A_5 + 2A_4$	[1]
3913	$2A_5 + A_4 + A_3 + A_1$	[2]
3914	$2A_5 + A_4 + 2A_2$	[3]
3915	$2A_5 + A_4 + A_2 + 2A_1$	empty
3916	$2A_5 + 2A_3 + A_2$	empty
3917	$2A_5 + 2A_3 + 2A_1$	[2, 2]
3918	$2A_5 + A_3 + 2A_2 + A_1$	[6]
3919	$2A_5 + 4A_2$	[3, 3]
3920	$A_5 + 3A_4 + A_1$	empty
3921	$A_5 + 2A_4 + A_3 + A_2$	empty
3922	$A_5 + 2A_4 + A_3 + 2A_1$	empty
3923	$A_5 + 2A_4 + 2A_2 + A_1$	empty
3924	$A_5 + A_4 + 3A_3$	empty

Table 1 (rank 18)

3925	$A_5 + A_4 + 2A_3 + A_2 + A_1$	[2]
3926	$A_5 + A_4 + A_3 + 3A_2$	empty
3927	$A_5 + 4A_3 + A_1$	empty
3928	$A_5 + 3A_3 + 2A_2$	empty
3929	$4A_4 + A_2$	empty
3930	$4A_4 + 2A_1$	[5]
3931	$3A_4 + 2A_3$	empty
3932	$3A_4 + A_3 + A_2 + A_1$	empty
3933	$3A_4 + 3A_2$	empty
3934	$2A_4 + 3A_3 + A_1$	empty
3935	$2A_4 + 2A_3 + 2A_2$	[1]
3936	$A_4 + 4A_3 + A_2$	empty
3937	$6A_3$	[4, 4]

Table 2

$G = \mathbb{Z}/(3)$
$3\,E_6$, $2\,E_6 + A_5 + A_1$, $2\,E_6 + A_5$, $2\,E_6 + 2\,A_2 + A_1$, $2\,E_6 + 2\,A_2$, $E_6 + A_{11} + A_1$, $E_6 + A_{11}$, $E_6 + A_8 + 2\,A_2$, $E_6 + A_8 + A_2 + 2\,A_1$, $E_6 + A_8 + A_2 + A_1$, $E_6 + A_8 + A_2$, $E_6 + 2\,A_5 + A_2$, $E_6 + 2\,A_5 + A_1$, $E_6 + 2\,A_5$, $E_6 + A_5 + A_3 + 2\,A_2$, $E_6 + A_5 + 3\,A_2$, $E_6 + A_5 + 2\,A_2 + 2\,A_1$, $E_6 + A_5 + 2\,A_2 + A_1$, $E_6 + A_5 + 2\,A_2$, $E_6 + A_3 + 4\,A_2$, $E_6 + 5\,A_2$, $E_6 + 4\,A_2 + 2\,A_1$, $E_6 + 4\,A_2 + A_1$, $E_6 + 4\,A_2$, $A_{17} + A_1$, A_{17} , $A_{14} + 2\,A_2$, $A_{14} + A_2 + 2\,A_1$, $A_{14} + A_2 + A_1$, $A_{14} + A_2$, $A_{11} + A_5 + A_2$, $A_{11} + A_5 + A_1$, $A_{11} + A_5$, $A_{11} + A_3 + 2\,A_2$, $A_{11} + 3\,A_2 + A_1$, $A_{11} + 3\,A_2$, $A_{11} + 2\,A_2 + 2\,A_1$, $A_{11} + 2\,A_2 + A_1$, $A_{11} + 2\,A_2$, $2\,A_8 + 2\,A_1$, $2\,A_8 + A_1$, $2\,A_8$, $A_8 + A_5 + A_3 + A_2$, $A_8 + A_5 + 2\,A_2 + A_1$, $A_8 + A_5 + 2\,A_2$, $A_8 + A_5 + A_2 + 2\,A_1$, $A_8 + A_5 + A_2 + A_1$, $A_8 + A_5 + A_2$, $A_8 + A_4 + 3\,A_2$, $A_8 + A_3 + 3\,A_2 + A_1$, $A_8 + A_3 + 3\,A_2$, $A_8 + 4\,A_2 + A_1$, $A_8 + 4\,A_2$, $A_8 + 3\,A_2 + 3\,A_1$, $A_8 + 3\,A_2 + 2\,A_1$, $A_8 + 3\,A_2 + A_1$, $A_8 + 3\,A_2$, $3\,A_5 + A_2$, $3\,A_5 + A_1$, $3\,A_5$, $2\,A_5 + A_4 + 2\,A_2$, $2\,A_5 + A_3 + 2\,A_2$, $2\,A_5 + 3\,A_2 + A_1$, $2\,A_5 + 3\,A_2$, $2\,A_5 + 2\,A_2 + 2\,A_1$, $2\,A_5 + 2\,A_2 + A_1$, $2\,A_5 + 2\,A_2$, $A_5 + A_4 + 4\,A_2$, $A_5 + A_3 + 4\,A_2 + A_1$, $A_5 + A_3 + 4\,A_2$, $A_5 + 5\,A_2 + A_1$, $A_5 + 5\,A_2$, $A_5 + 4\,A_2 + 3\,A_1$, $A_5 + 4\,A_2 + 2\,A_1$, $A_5 + 4\,A_2 + A_1$, $A_5 + 4\,A_2$, $A_4 + 6\,A_2$, $A_3 + 6\,A_2 + A_1$, $A_3 + 6\,A_2$, $7\,A_2 + A_1$, $7\,A_2$, $6\,A_2 + 3\,A_1$, $6\,A_2 + 2\,A_1$, $6\,A_2 + A_1$, $6\,A_2$

$G = \mathbb{Z}/(4)$
$D_7 + A_{11}$, $D_7 + A_7 + A_3 + A_1$, $D_7 + A_7 + A_3$, $D_7 + 3\,A_3 + A_2$, $D_7 + 3\,A_3 + A_1$, $D_7 + 3\,A_3$, $2\,D_5 + A_7 + A_1$, $2\,D_5 + A_7$, $2\,D_5 + 2\,A_3 + A_1$, $2\,D_5 + 2\,A_3$, $D_5 + A_{11} + 2\,A_1$, $D_5 + A_{11} + A_1$, $D_5 + A_7 + A_3 + A_2 + A_1$, $D_5 + A_7 + A_3 + 2\,A_1$, $D_5 + A_7 + A_3 + A_1$, $D_5 + 3\,A_3 + A_2 + A_1$, $D_5 + 3\,A_3 + 2\,A_1$, $D_5 + 3\,A_3 + A_1$, $A_{15} + A_3$, $A_{15} + 3\,A_1$, $A_{15} + 2\,A_1$, $A_{11} + 2\,A_3 + A_1$, $A_{11} + 2\,A_3$, $A_{11} + A_3 + A_2 + 2\,A_1$, $A_{11} + A_3 + 3\,A_1$, $A_{11} + A_3 + 2\,A_1$, $2\,A_7 + A_3$, $2\,A_7 + 3\,A_1$, $2\,A_7 + 2\,A_1$, $A_7 + 3\,A_3 + A_2$, $A_7 + 3\,A_3 + A_1$, $A_7 + 3\,A_3$, $A_7 + 2\,A_3 + A_2 + 2\,A_1$, $A_7 + 2\,A_3 + 3\,A_1$, $A_7 + 2\,A_3 + 2\,A_1$, $5\,A_3 + A_2$, $5\,A_3 + A_1$, $5\,A_3$, $4\,A_3 + A_2 + 2\,A_1$, $4\,A_3 + 3\,A_1$, $4\,A_3 + 2\,A_1$

$G = \mathbb{Z}/(5)$
$2\,A_9$, $A_9 + 2\,A_4 + A_1$, $A_9 + 2\,A_4$, $4\,A_4 + 2\,A_1$, $4\,A_4 + A_1$, $4\,A_4$

$G = \mathbb{Z}/(6)$
$A_{11} + A_5 + 2\,A_1$, $A_{11} + A_3 + 2\,A_2$, $A_{11} + 2\,A_2 + 3\,A_1$, $A_{11} + 2\,A_2 + 2\,A_1$, $3\,A_5 + A_3$, $3\,A_5 + 2\,A_1$, $2\,A_5 + A_3 + 2\,A_2 + A_1$, $2\,A_5 + A_3 + 2\,A_2$, $2\,A_5 + 2\,A_2 + 3\,A_1$, $2\,A_5 + 2\,A_2 + 2\,A_1$

$G = \mathbb{Z}/(7)$
$3\,A_6$

$G = \mathbb{Z}/(8)$
$2\,A_7 + A_3 + A_1$

$G = \mathbb{Z}/(2) \times \mathbb{Z}/(2)$
$D_{10} + A_5 + 3\,A_1$, $D_{10} + 2\,A_3 + 2\,A_1$, $D_{10} + A_3 + 4\,A_1$, $D_{10} + 6\,A_1$, $2\,D_8 + 2\,A_1$, $D_8 + D_6 + A_3 + A_1$, $D_8 + D_6 + 3\,A_1$, $D_8 + D_4 + A_3 + 2\,A_1$, $D_8 + D_4 + 4\,A_1$, $D_8 + A_5 + A_3 + 2\,A_1$, $D_8 + A_5 + 4\,A_1$, $D_8 + 2\,A_3 + 3\,A_1$, $D_8 + A_3 + 5\,A_1$, $D_8 + 7\,A_1$, $3\,D_6$, $2\,D_6 + D_4 + A_1$, $2\,D_6 + 2\,A_3$, $2\,D_6 + A_3 + 2\,A_1$, $2\,D_6 + 4\,A_1$, $D_6 + 2\,D_4 + 2\,A_1$, $D_6 + D_4 + 2\,A_3 + A_1$, $D_6 + D_4 + A_3 + 3\,A_1$, $D_6 + D_4 + 5\,A_1$, $D_6 + 2\,A_5 + 2\,A_1$, $D_6 + A_5 + 2\,A_3 + A_1$, $D_6 + A_5 + A_3 + 3\,A_1$, $D_6 + A_5 + 5\,A_1$, $D_6 + 3\,A_3 + 2\,A_1$, $D_6 + 2\,A_3 + 4\,A_1$, $D_6 + A_3 + 6\,A_1$, $D_6 + 8\,A_1$, $4\,D_4$, $3\,D_4 + 3\,A_1$, $2\,D_4 + 2\,A_3 + 2\,A_1$, $2\,D_4 + A_3 + 4\,A_1$, $2\,D_4 + 6\,A_1$, $D_4 + 2\,A_5 + 3\,A_1$, $D_4 + A_5 + 2\,A_3 + 2\,A_1$, $D_4 + A_5 + A_3 + 4\,A_1$, $D_4 + A_5 + 6\,A_1$, $D_4 + 3\,A_3 + 3\,A_1$, $D_4 + 2\,A_3 + 5\,A_1$, $D_4 + A_3 + 7\,A_1$, $D_4 + 9\,A_1$, $A_7 + A_5 + A_3 + 3\,A_1$, $A_7 + A_5 + 5\,A_1$, $A_7 + 2\,A_3 + 4\,A_1$, $A_7 + A_3 + 6\,A_1$, $A_7 + 8\,A_1$, $2\,A_5 + 2\,A_3 + 2\,A_1$, $2\,A_5 + A_3 + 4\,A_1$, $2\,A_5 + 6\,A_1$, $A_5 + 3\,A_3 + 3\,A_1$, $A_5 + 2\,A_3 + 5\,A_1$, $A_5 + A_3 + 7\,A_1$, $A_5 + 9\,A_1$, $4\,A_3 + 4\,A_1$, $3\,A_3 + 6\,A_1$, $2\,A_3 + 8\,A_1$, $A_3 + 10\,A_1$, $12\,A_1$

$G = \mathbb{Z}/(4) \times \mathbb{Z}/(2)$
$2\,A_7 + 4\,A_1$, $A_7 + 3\,A_3 + 2\,A_1$, $A_7 + 2\,A_3 + 4\,A_1$, $5\,A_3 + 2\,A_1$, $4\,A_3 + 4\,A_1$

$G = \mathbb{Z}/(6) \times \mathbb{Z}/(2)$
$3\,A_5 + 3\,A_1$

$G = \mathbb{Z}/(3) \times \mathbb{Z}/(3)$
$2\,A_5 + 4\,A_2$, $A_5 + 6\,A_2$, $8\,A_2$

$G = \mathbb{Z}/(4) \times \mathbb{Z}/(4)$
$6\,A_3$