Table C.16. Orbits in E_6 (I)

A_0	1	36	270	120	540	720	270	1080	120	540	216	45	360	216
A_1		1	15	10	45	80	45	150	20	105	60	15	70	66
A_1^2			1	0	6	8	3	28	4	18	12	3	20	20
A_2				1	0	6	9	9	2	18	18	6	6	18
A_1^3					1	0	0	6	0	3	0	1	6	6
$A_1 \times A_2$						1	0	3	1	3	3	0	4	6
A_3							1	0	0	2	4	2	0	4
$A_1^2 \times A_2$								1	0	0	0	0	2	2
A_2^2									1	0	0	0	3	0
$A_1 \times A_3$										1	0	0	0	2
A_4											1	0	0	1
D_4												1	0	0
$A_1 \times A_2^2$													1	0
$A_1 \times A_4$														1
A_5														
D_5														
E_6														

Table C.18. Orbits in E_6 (II)

36	27	1	1	4	5	7	8	11
15	15	1	1	4	5	7	8	
6	7	1	1	4	5	7		
6	9	1	1	4	5	5		
1	3	1	1	4	5			
3	3	1	1	4	5			
2	5	1	1	3	4			
0	1	1	1	4				
3	0	1	1	5				
1	1	1	1	3				
1	2	1	1	3				
0	3	1	1	2				
0	0	1	1					
0	0	1	1					
0	1	1	1					
		1						

Table C.19. Orbits in E_7 (I)

A_0	1	63	945	336	315	3780	5040	1260	3780	15120	3360	1260	7560	2016	315	5040
A_1		1	30	16	15	180	320	120	240	1200	320	140	840	320	60	480
A_1^2			1	0	1	12	16	4	24	112	32	12	72	32	6	64
A_2				1	0	0	15	15	0	45	20	15	90	60	15	15
$(A_1^3)'$					1	0	0	0	12	0	0	12	0	0	0	16
$(A_1^3)''$						1	0	0	3	12	0	0	6	0	1	12
$A_1 \times A_2$							1	0	0	6	4	1	6	4	0	3
A_3								1	0	0	0	1	6	8	3	0
A_1^4									1	0	0	0	0	0	0	4
$A_1^2 \times A_2$										1	0	0	0	0	0	1
A_2^2											1	0	0	0	0	0
$(A_1 \times A_3)'$												1	0	0	0	0
$(A_1 \times A_3)''$													1	0	0	0
A_4														1	0	0
D_4															1	0
$A_1^3 \times A_2$																1
$A_1 \times A_2^2$																
$A_1^2 \times A_3$																
$A_2 \times A_3$																
$A_1 \times A_4$																
A_5'																
A_5''																
$A_1 \times D_4$																
D_5																
$A_1 \times A_2 \times A_3$																
$A_2 \times A_4$																
$A_1 \times A_5$																
A_6																
$A_1 \times D_5$																
D_6																
E_6																
E_7																

Table C.20. Orbits in E_7 (II)

A_0	10080	7560	5040	6048	336	1008	945	378	5040	2016	1008	288	378	63	28	1	1 5 7 9 11 13 17
A_1	1120	960	720	1056	80	240	195	120	800	416	256	96	126	30	16	1	1 5 7 9 11 13
A_1^2	160	128	112	160	16	48	30	28	160	96	64	32	36	13	8	1	1 5 7 9 11
A_2	60	90	75	180	20	60	45	45	75	66	60	30	45	15	10	1	1 5 7 8 9
$(A_1^3)'$	0	72	0	0	16	0	18	0	48	0	48	0	12	12	0	1	1 5 7 11
$(A_1^3)''$	24	18	12	24	0	4	6	6	36	24	12	8	12	4	4	1	1 5 7 9
$A_1 \times A_2$	16	12	18	24	4	12	3	6	23	20	16	12	9	6	4	1	1 5 7 8
A_3	0	6	4	24	4	12	9	15	4	8	12	8	15	7	6	1	1 5 5 7
A_1^4	0	6	0	0	0	0	3	0	12	0	4	0	6	3	0	1	1 5 7
$A_1^2 \times A_2$	4	2	1	4	0	0	0	1	7	6	4	2	3	1	2	1	1 5 7
A_2^2	3	0	6	0	1	3	0	0	6	6	3	6	0	3	1	1	1 5 7
$(A_1 \times A_3)'$	0	6	0	0	4	0	3	0	4	0	12	0	3	6	0	1	1 5 7
$(A_1 \times A_3)''$	0	1	2	4	0	2	1	1	2	4	2	4	3	2	2	1	1 5 5
A_4	0	0	0	3	1	3	0	3	0	1	3	3	3	3	3	1	1 4 5
D_4	0	0	0	0	0	0	3	6	0	0	0	0	6	3	4	1	1 3 5
$A_1^3 \times A_2$	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	1	1 5
$A_1 \times A_2^2$	1	0	0	0	0	0	0	0	2	2	1	0	0	0	1	1	1 5
$A_1^2 \times A_3$		1	0	0	0	0	0	0	2	0	2	0	1	1	0	1	1 5
$A_2 \times A_3$			1	0	0	0	0	0	1	2	0	2	0	1	0	1	1 5
$A_1 \times A_4$				1	0	0	0	0	0	1	1	1	1	0	1	1	1 4
A_5'					1	0	0	0	0	0	3	0	0	3	0	1	1 5
A_5''						1	0	0	0	0	0	2	0	1	1	1	1 3
$A_1 \times D_4$							1	0	0	0	0	0	2	2	0	1	1 3
D_5								1	0	0	0	0	1	1	2	1	1 3
$A_1 \times A_2 \times A_3$									1	0	0	0	0	0	0	1	1
$A_2 \times A_4$										1	0	0	0	0	0	1	1
$A_1 \times A_5$											1	0	0	0	0	1	1
A_6												1	0	0	0	1	1
$A_1 \times D_5$													1	0	0	1	1
D_6														1	0	1	1
E_6															1	1	1
E_7																1	

Table C.21. Orbits in E_8 (I)

A_0	1	120	3780	1120	37800	40320	7560	113400	302400	67200	151200	24192	3150	604800
A_1		1	63	28	945	1344	378	3780	12600	3360	8820	2016	315	30240
A_1^2			1	0	30	32	6	180	560	160	360	96	15	1920
A_2				1	0	36	27	0	270	120	540	216	45	540
A_1^3					1	0	0	12	24	0	12	0	1	160
$A_1 \times A_2$						1	0	0	15	10	15	6	0	45
A_3							1	0	0	0	20	16	5	0
A_1^4								1	0	0	0	0	0	16
$A_1^2 \times A_2$									1	0	0	0	0	6
A_2^2										1	0	0	0	0
$A_1 \times A_3$											1	0	0	0
A_4												1	0	0
D_4													1	0
$A_1^3 \times A_2$														1
$A_1 \times A_2^2$														
$A_1^2 \times A_3$														
$A_2 \times A_3$														
$A_1 \times A_4$														
A_5														
$A_1 \times D_4$														
D_5														
$A_1^2 \times A_2^2$														
$A_1 \times A_2 \times A_3$														
$A_1^2 \times A_4$														
A_3^2														
$A_2 \times A_4$														
$A_1 \times A_5$														
A_6														
$A_2 \times D_4$														
$A_1 \times D_5$														
D_6														
E_6														
$A_1 \times A_2 \times A_4$														
$A_3 \times A_4$														
$A_1 \times A_6$														
A_7														
$A_2 \times D_5$														
D_7														
$A_1 \times E_6$														
E_7														
E_8														

A_0	403200	453600	302400	241920	40320	37800	7560	604800	604800	362880	151200	241920	120960	34560
A_1	23520	30240	22680	22176	5040	4095	1260	40320	50400	36288	15120	26208	16128	6048
A_1^2	1600	1920	1680	1600	480	300	140	3520	4800	3456	1680	2880	1920	960
A_2	720	1620	1350	2160	720	540	270	1080	2700	3240	1080	2376	2160	1080
A_1^3	96	144	72	96	16	30	12	384	480	384	144	288	192	96
$A_1 \times A_2$	80	90	135	120	60	15	15	150	345	270	180	300	240	180
A_3	0	60	40	160	80	60	50	0	80	240	40	160	240	160
A_1^4	0	12	0	0	0	4	0	48	48	48	12	0	16	0
$A_1^2 \times A_2$	8	6	3	8	0	0	1	28	42	36	12	36	24	12
A_2^2	6	0	18	0	6	0	0	9	36	0	36	36	18	36
$A_1 \times A_3$	0	6	6	8	4	3	1	0	16	24	12	24	24	24
A_4	0	0	0	10	10	0	5	0	0	15	0	10	30	30
D_4	0	0	0	0	0	12	12	0	0	0	0	0	0	0
$A_1^3 \times A_2$	0	0	0	0	0	0	0	6	3	6	0	0	0	0
$A_1 \times A_2^2$	1	0	0	0	0	0	0	3	6	0	0	6	3	0
$A_1^2 \times A_3$		1	0	0	0	0	0	0	4	4	2	0	4	0
$A_2 \times A_3$			1	0	0	0	0	0	2	0	4	4	0	4
$A_1 \times A_4$				1	0	0	0	0	0	3	0	3	3	3
A_5					1	0	0	0	0	0	0	0	3	6
$A_1 \times D_4$						1	0	0	0	0	0	0	0	0
D_5							1	0	0	0	0	0	0	0
$A_1^2 \times A_2^2$								1	0	0	0	0	0	0
$A_1 \times A_2 \times A_3$									1	0	0	0	0	0
$A_1^2 \times A_4$										1	0	0	0	0
A_3^2											1	0	0	0
$A_2 \times A_4$												1	0	0
$A_1 \times A_5$													1	0
A_6														1
$A_2 \times D_4$														
$A_1 \times D_5$														
D_6														
E_6														
$A_1 \times A_2 \times A_4$														
$A_3 \times A_4$														
$A_1 \times A_6$														
A_7														
$A_2 \times D_5$														
D_7														
$A_1 \times E_6$														
E_7														
E_8														

Table C.22. Orbits in E_8 (II)

Table C.23. Orbits in E_8 (III)

50400	45360	3780	1120	241920	120960	34560	8640	30240	1080	3360	120	1	1	7	11	13	17	19	23	29
6300	7938	945	336	28224	16128	6336	2016	5796	378	1036	63	1	1	7	11	13	17	19	23	
720	1080	195	80	3712	2496	1152	480	1040	126	272	30	1	1	7	11	13	17	19		
765	1620	270	120	2376	1512	1080	432	1107	135	360	36	1	1	7	11	13	14	17		
88	156	30	16	576	384	192	96	216	36	72	13	1	1	7	11	13	17			
75	135	45	20	366	330	210	120	165	45	70	15	1	1	7	11	13	14			
80	300	70	40	160	96	160	80	200	45	120	20	1	1	7	9	11	13			
16	24	6	0	96	48	32	8	48	12	16	4	1	1	7	11	13				
3	18	3	4	76	60	36	24	35	9	20	6	1	1	7	11	13				
12	0	9	2	36	72	36	36	18	18	6	6	1	1	7	11	11				
12	21	9	4	32	32	32	24	34	15	18	7	1	1	7	9	11				
0	30	15	10	10	5	30	20	20	15	30	10	1	1	7	8	9				
16	72	18	16	0	0	0	0	48	12	48	12	1	1	5	7	11				
1	3	0	0	18	6	6	0	9	3	6	1	1	1	7	11					
0	0	0	1	12	12	6	6	6	0	4	3	1	1	7	11					
0	2	1	0	8	8	8	4	4	3	4	2	1	1	7	9					
2	0	1	0	4	12	4	8	5	6	0	2	1	1	7	9					
0	3	0	1	4	3	6	6	6	3	6	3	1	1	7	8					
0	0	3	1	0	0	6	6	0	6	3	4	1	1	5	7					
4	6	3	0	0	0	0	0	12	6	4	3	1	1	5	7					
0	6	3	4	0	0	0	0	4	3	12	6	1	1	5	7					
0	0	0	0	4	0	0	0	2	0	2	0	1	1	7						
0	0	0	0	2	2	2	0	1	0	0	1	1	1	7						
0	0	0	0	2	1	2	0	0	1	2	0	1	1	7						
0	0	0	0	0	4	0	2	0	2	0	0	1	1	7						
0	0	0	0	1	2	0	2	2	0	0	1	1	1	7						
0	0	0	0	0	0	2	2	0	0	1	1	1	1	5						
0	0	0	0	0	0	1	2	0	2	0	1	1	1	5						
1	0	0	0	0	0	0	0	3	3	0	0	1	1	5						
	1	0	0	0	0	0	0	2	1	2	1	1	1	5						
		1	0	0	0	0	0	0	2	0	2	1	1	3						
			1	0	0	0	0	0	0	3	3	1	1	5						
				1	0	0	0	0	0	0	0	1	1							
					1	0	0	0	0	0	0	1	1							
						1	0	0	0	0	0	1	1							
							1	0	0	0	0	1	1							
								1	0	0	0	1	1							
									1	0	0	1	1							
										1	0	1	1							
											1	1	1							