

**THE ALPERIN WEIGHT CONJECTURE AND DADE'S
CONJECTURE FOR THE SIMPLE GROUP Fi'_{24}**

JIANBEI AN, JOHN J. CANNON, E.A. O'BRIEN, AND W.R. UNGER

APPENDIX A

DEGREES OF IRREDUCIBLE CHARACTERS OF
CHAIN NORMALIZERS OF Fi'_{24} AND Fi_{24}

Degree	1	78	352	429	1001	1430	3003	3080
Number	2	2	2	2	2	2	2	2
Degree	4160	10725	11648	13650	27456	30030	32032	43680
Number	1	2	2	2	3	2	2	2
Degree	45045	48048	50050	75075	81081	96096	105600	114400
Number	2	2	4	6	2	1	4	2
Degree	123200	133056	150150	205920	228800	277200	289575	292864
Number	2	2	2	2	2	1	2	1
Degree	300300	320320	360855	370656	450450	471744	576576	577368
Number	2	2	2	2	4	1	2	2
Degree	579150	600600	640640	675675	720720	800800	852930	873600
Number	2	2	1	2	2	5	2	1
Degree	938223	960960	972972	1029600	1164800	1201200	1360800	1372800
Number	2	1	2	2	1	3	2	3
Degree	1441792	1791153	1830400	1876446	1965600	2027025	2050048	2316600
Number	4	2	1	2	1	2	2	2
Degree	2402400	2555904	2594592	2729376	3326400	4392960	4717440	4804800
Number	3	4	1	2	1	1	1	1
Degree	5111808							
Number	1							

TABLE A-1. The degrees of characters in $\text{Irr}(2.\text{Fi}_{22}.2)$

Degree	1	78	429	704	1001	1430	3003	3080
Number	4	4	4	1	4	4	4	4
Degree	4160	10725	11648	13650	27456	30030	32032	43680
Number	2	4	4	4	2	4	4	4
Degree	45045	48048	50050	54912	75075	81081	96096	114400
Number	4	4	8	1	12	4	2	4
Degree	150150	205920	211200	246400	266112	277200	289575	292864
Number	4	4	2	1	1	2	4	2
Degree	300300	320320	360855	370656	450450	457600	471744	576576
Number	4	4	4	4	8	1	2	4
Degree	577368	579150	600600	640640	675675	720720	800800	852930
Number	4	4	4	2	4	4	10	4
Degree	873600	938223	960960	972972	1164800	1201200	1360800	1372800
Number	2	4	2	4	2	6	4	6
Degree	1441792	1791153	1830400	1876446	1965600	2027025	2050048	2059200
Number	4	4	2	4	2	4	4	1
Degree	2316600	2402400	2555904	2594592	2729376	2883584	3326400	4392960
Number	4	6	8	2	4	1	2	2
Degree	4717440	4804800	5111808					
Number	2	2	2					

TABLE A-2. The degrees of characters in $\text{Irr}((2 \times 2.\text{Fi}_{22}):2)$

Degree	1	22	56	112	176	231	252	352	385
Number	2	2	2	1	2	2	2	1	2
Degree	440	560	616	792	1155	1232	1386	1540	1584
Number	2	2	4	2	2	3	2	3	1
Degree	2310	2464	3080	3520	4620	4928	5544	6160	6720
Number	1	3	2	2	2	3	4	4	3
Degree	6930	7776	8064	9240	9856	10395	11088	11264	12320
Number	2	2	2	2	2	2	1	4	7
Degree	13608	13860	14784	15552	15840	18480	18711	19712	20790
Number	2	2	2	1	2	3	4	1	2
Degree	21384	22176	22528	24640	27216	27720	30240	31680	32768
Number	2	2	1	8	1	2	2	1	4
Degree	36960	37422	40095	41580	42768	44352	49280	51030	55440
Number	1	2	2	1	1	3	4	1	1
Degree	60480	65536	88704						
Number	1	1	1						

TABLE A-3. The degrees of characters in $\text{Irr}(2^2.U_6(2):2)$

Degree	1	20	21	35	45	56	64	70	84	105
Number	2	2	2	2	4	2	2	1	2	2
Degree	112	120	126	210	240	280	315	336	360	420
Number	1	2	2	4	1	8	4	2	4	2
Degree	504	560	630	672	720	840	896	960	1008	1120
Number	2	7	5	1	4	2	3	2	1	1
Degree	1260	1344	1440	1680	1920	2016	2240	2688	3360	
Number	4	2	1	3	1	3	2	1	1	

TABLE A-4. The degrees of characters in $\text{Irr}(2^{11}.L_3(4):2)$

Degree	1	4	5	6	10	15	16	20	30	32	40	60
Number	2	2	4	1	5	10	4	2	6	1	8	6
Degree	64	80	96	120	128	160	192	240	320	384	480	640
Number	4	18	8	20	1	20	2	15	6	3	2	1

TABLE A-5. The degrees of characters in $\text{Irr}((2^2 \times 2^{1+8}):2^4.S_5)$

Degree	1	6	10	15	16	20	24	30	32
Number	2	2	1	4	4	3	2	2	1
Degree	40	60	64	80	81	90	96	120	135
Number	4	3	2	5	2	1	4	8	4
Degree	160	192	216	240	270	320	384	405	432
Number	5	1	4	17	2	14	4	4	2
Degree	480	540	640	720	768	810	864	960	1024
Number	15	4	4	4	1	4	4	13	4
Degree	1080	1280	1296	1440	1728	1920	2048	2160	2592
Number	6	4	6	5	2	1	1	2	2

TABLE A-6. The degrees of characters in $\text{Irr}((2^2 \times 2^{1+8}).U_4(2):2)$

Degree	1	4	5	6	15	16	20	30	32	40
Number	4	4	4	2	8	4	4	10	2	10
Degree	60	64	80	96	120	128	160	240	320	480
Number	18	4	16	6	16	2	20	15	4	7

TABLE A-7. The degrees of characters in $\text{Irr}(2^{11}.2^4.S_5)$

Degree	1	2	4	5	6	8	10	12	16	20	30
Number	4	2	4	4	2	2	2	1	4	4	2
Degree	32	40	45	60	64	80	90	96	120	128	160
Number	4	12	8	9	5	21	4	6	6	4	28
Degree	180	192	240	256	320	360	480	640	720	960	
Number	8	3	7	1	14	10	10	2	4	2	

TABLE A-8. The degrees of characters in $\text{Irr}(2^{6+8}.(S_3 \times S_5))$

Degree	1	2	3	4	6	8	9	12	16	18	24
Number	4	4	4	5	4	4	8	5	17	4	14
Degree	32	36	48	64	72	96	128	144	192	256	288
Number	34	16	23	21	12	23	14	16	11	5	7

TABLE A-9. The degrees of characters in $\text{Irr}((2^2 \times 2^{1+8}).2.2^4.(S_3 \times S_3))$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96	128	192
Number	4	2	12	4	10	2	22	16	32	26	37	8	33	10	4

TABLE A-10. The degrees of characters in $\text{Irr}((2^2 \times 2^{1+8}).2^4.2^2.S_3)$

Degree	1	2	28	50	56	100	105	175	210	252
Number	4	5	4	4	5	5	4	4	1	4
Degree	300	350	504	525	600	630	700	972	1050	1260
Number	4	9	1	4	5	4	9	4	5	1
Degree	1400	1701	1944	2100	2520	2800	3150	3200	3402	4032
Number	9	4	5	4	4	5	4	4	1	4
Degree	4096	4200	4725	5040	6075	6300	6400	6720	6804	8064
Number	4	5	4	1	4	5	5	4	4	1
Degree	8192	8400	8505	9450	12150	12600	13440	13608	17010	
Number	5	5	4	1	5	1	1	1	1	

TABLE A-11. The degrees of characters in $\text{Irr}((2^2 \times O_8^+(2):3):2)$

Degree	1	2	4	28	50	56	100	105	112	175
Number	8	6	1	8	8	6	6	8	1	8
Degree	200	210	252	300	350	504	525	600	630	700
Number	1	2	8	8	14	2	8	6	8	15
Degree	972	1050	1200	1260	1400	1701	1944	2100	2520	2800
Number	8	6	1	2	15	8	6	9	8	7
Degree	3150	3200	3402	3888	4032	4096	4200	4725	5040	5600
Number	8	8	2	1	8	8	10	8	2	1
Degree	6075	6300	6400	6720	6804	8064	8192	8400	8505	9450
Number	8	10	6	8	8	2	6	6	8	2
Degree	12150	12600	12800	13440	13608	16384	16800	17010	24300	
Number	6	2	1	2	2	1	1	2	1	

TABLE A-12. The degrees of characters in $\text{Irr}((2^2 \times O_8^+(2):3):2.2)$

Degree	1	2	7	14	20	21	28	35	40	42
Number	4	1	4	5	4	4	13	12	1	5
Degree	56	64	70	90	112	128	140	210	252	280
Number	7	4	11	4	1	1	29	8	8	13
Degree	315	420	448	504	560	630	840	896		
Number	8	6	4	2	2	6	1	1		

TABLE A-13. The degrees of characters in $\text{Irr}(2^8:S_8)$

Degree	1	2	7	14	20	21	28	35	40	42	56
Number	8	2	8	10	8	8	26	24	2	6	14
Degree	64	70	84	90	112	128	140	180	210	252	280
Number	8	18	1	4	2	2	51	1	16	16	28
Degree	315	420	448	504	560	630	840	896	1260		
Number	16	12	8	4	4	8	2	2	1		

TABLE A-14. The degrees of characters in $\text{Irr}(2^8:S_8.2)$

Degree	1	3	6	7	8	14	21	28	42	56	84
Number	4	8	4	28	4	12	24	32	16	16	32

TABLE A-15. The degrees of characters in $\text{Irr}(2^8.2^3.L_3(2))$

Degree	1	2	3	6	7	8	12	14	16	21	28	42	56	84	112	168
Number	4	1	8	6	28	4	1	19	1	24	35	22	24	36	4	8

TABLE A-16. The degrees of characters in $\text{Irr}(2^8.2^3.L_3(2).2)$

Degree	1	2	3	4	6	8	12	24
Number	8	4	56	56	28	28	56	64

TABLE A-17. The degrees of characters in $\text{Irr}(2^8.2^3.2^2.S_3)$

Degree	1	2	3	4	6	8	12	16	24	48
Number	8	6	56	57	42	42	63	7	78	16

TABLE A-18. The degrees of characters in $\text{Irr}(2^8.2^3.2^2.S_3.2)$

Degree	1	2	4	6	8	9	12	16	18
Number	16	12	24	16	2	16	28	16	28
Degree	24	32	36	48	64	72	128	144	
Number	14	12	44	2	24	8	2	1	

TABLE A-19. The degrees of characters in $\text{Irr}(2^8.2^4.(S_3 \times S_3).2)$

Degree	1	2	4	6	8	9	12	16	18	24	32	36	48	64	72	128	144
Number	32	16	34	32	8	32	56	32	48	28	16	66	4	34	22	8	2

TABLE A-20. The degrees of characters in $\text{Irr}(2^8.2^4.(S_3 \times S_3).2.2)$

Degree	1	2	3	6	12	16	24	32
Number	32	16	32	96	64	32	20	16

TABLE A-21. The degrees of characters in $\text{Irr}(2^3.2^2.2^4.2^4.S_3)$

Degree	1	2	3	4	6	12	16	24	32	48	64
Number	32	24	32	4	104	88	32	36	24	5	4

TABLE A-22. The degrees of characters in $\text{Irr}(2^3.2^2.2^4.2^4.S_3.2)$

Degree	1	2	4	8	16
Number	64	112	112	92	32

TABLE A-23. The degrees of characters in $\text{Irr}(2^8.2^4.2^2)$

Degree	1	2	4	8	16	32
Number	64	128	140	120	55	8

TABLE A-24. The degrees of characters in $\text{Irr}(2^8.2^4.2^2.2)$

Degree	1	2	3	6	8	12	16	24	27	32	48	54
Number	8	10	8	10	4	22	13	16	8	10	13	30
Degree	72	81	96	108	128	144	162	192	216	256	324	384
Number	4	8	10	25	4	1	6	14	12	5	1	2

TABLE A-25. The degrees of characters in $\text{Irr}(2^3.2^8.3.(S_3 \times S_3 \times S_3).2)$

Degree	1	2	3	4	6	8	12	16	24	27	32	48	54	64
Number	16	12	16	2	20	8	40	22	25	16	13	24	52	2
Degree	72	81	96	108	128	144	162	192	216	256	324	384	432	512
Number	8	16	21	48	8	2	12	24	17	6	2	5	2	1

TABLE A-26. The degrees of characters in $\text{Irr}(2^3.2^8.3.(S_3 \times S_3 \times S_3).2.2)$

Degree	1	2	3	4	6	8	12	16	24	48
Number	8	6	24	25	34	34	35	11	54	24

TABLE A-27. The degrees of characters in $\text{Irr}(2^4.2^4.2^4.2^2.S_3)$

Degree	1	2	3	4	6	8	12	16	24	32	48	96
Number	16	12	48	50	52	52	66	18	94	2	36	4

TABLE A-28. The degrees of characters in $\text{Irr}(2^4.2^4.2^4.2^2.S_3.2)$

Degree	1	2	3	6	7	8	12	14	16	21	28	42	56	84	112	168
Number	4	1	8	6	12	4	1	15	1	8	21	18	20	22	6	12

TABLE A-29. The degrees of characters in $\text{Irr}(2^4.2^4.2^4.L_3(2))$

Degree	1	2	3	6	7	8	12	14	16	21	28	42	56	84	112	168	224	336
Number	8	2	16	12	24	8	2	22	2	16	40	28	33	42	10	17	1	2

TABLE A-30. The degrees of characters in $\text{Irr}(2^4.2^4.2^4.L_3(2).2)$

Degree	1	2	3	4	6	12	16	24	32	48	64
Number	16	20	16	6	36	74	16	36	20	7	6

TABLE A-31. The degrees of characters in $\text{Irr}(2^3.2^8.D_8.S_3)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96	128
Number	32	32	32	10	64	1	114	32	65	32	14	10	1	1

TABLE A-32. The degrees of characters in $\text{Irr}(2^3.2^8.D_8.S_3.2)$

Degree	1	2	4	8	16	32
Number	32	56	96	88	51	12

TABLE A-33. The degrees of characters in $\text{Irr}(2^3.2^8.D_8.2)$

Degree	1	2	4	8	16	32	64
Number	64	96	156	154	86	22	2

TABLE A-34. The degrees of characters in $\text{Irr}(2^3.2^8.D_8.2.2)$

Degree	1	2	3	4	6	8	12	16	24	32	48	96
Number	16	24	16	21	32	40	43	33	32	10	14	2

TABLE A-35. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.2.S_3)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96
Number	32	32	32	42	64	65	82	50	65	17	28	2	4

TABLE A-36. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.2.S_3.2)$

Degree	1	2	3	4	6	8	9	12	16	18	24	36	48	72	144
Number	8	14	8	13	14	14	16	29	5	12	38	18	22	20	4

TABLE A-37. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.(S_3 \times S_3))$

Degree	1	2	3	4	6	8	9	12	16	18	24	32	36	48	72	96	144
Number	16	20	16	24	20	21	32	56	8	24	69	1	36	30	40	4	8

TABLE A-38. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.(S_3 \times S_3).2)$

Degree	1	2	3	4	6	8	12	16	24	48
Number	8	6	24	25	34	34	35	11	54	24

TABLE A-39. The degrees of characters in $\text{Irr}(2^4.2^4.2^4.2^2.S_3)$

Degree	1	2	3	4	6	8	12	16	24	32	48	96
Number	16	12	48	50	52	52	66	18	94	2	36	4

TABLE A-40. The degrees of characters in $\text{Irr}(2^4.2^4.2^4.2^2.S_3.2)$

Degree	1	2	4	8	16	32
Number	32	56	96	88	51	12

TABLE A-41. The degrees of characters in $\text{Irr}(2^3.2^8.D_8.2)$

Degree	1	2	4	8	16	32	64
Number	64	96	156	154	86	22	2

TABLE A-42. The degrees of characters in $\text{Irr}(2^3.2^8.D_8.2.2)$

Degree	1	7	15	21	27	35	56	63	70	72
Number	2	2	2	4	2	4	3	4	2	1
Degree	84	105	120	168	189	210	216	280	315	336
Number	2	6	2	2	6	4	2	6	10	3
Degree	378	405	420	504	512	560	567	630	840	945
Number	6	2	2	1	2	2	4	12	2	8
Degree	1008	1120	1260	1344	1440	1512	1680	1890	2016	2240
Number	3	1	2	1	1	7	3	8	1	2
Degree	2268	2520	2835	3240	3360	3584	4032	4536	4608	5040
	2	11	8	2	1	1	1	1	1	1

TABLE A-43. The degrees of characters in $\text{Irr}(2^8.S_6(2))$

Degree	1	7	15	21	27	35	56	63	70	72	84
Number	4	4	4	8	4	8	6	8	4	2	4
Degree	105	120	168	189	210	216	280	315	336	378	405
Number	12	4	4	12	8	4	8	20	6	12	4
Degree	420	504	512	560	567	630	840	945	1008	1120	1260
Number	4	2	4	1	8	24	4	16	6	3	4
Degree	1344	1440	1512	1680	1890	2016	2268	2520	2835	3024	3360
Number	2	2	10	2	16	2	4	18	16	1	3
Degree	3584	4032	4480	4536	4608	5040	6480				
	2	2	1	2	2	3	1				

TABLE A-44. The degrees of characters in $\text{Irr}(2^8.S_6(2).2)$

Degree	1	5	6	9	10	15	16	20	24	30	32	36	40	45
Number	8	16	8	8	24	16	4	4	9	32	8	4	20	16
Degree	60	72	80	90	96	120	160	180	240	288	320	360	480	512
Number	8	2	4	48	1	20	17	8	12	8	8	5	2	4

TABLE A-45. The degrees of characters in $\text{Irr}(2^8.2^5.S_6)$

Degree	1	5	6	9	10	15	16	20	24	30	32	36	40	45	60
Number	16	32	16	16	48	32	8	8	18	64	16	8	36	32	16
Degree	80	90	96	120	144	160	180	240	288	320	360	480	512	720	
Number	1	96	2	36	1	36	16	25	16	16	6	4	8	1	

TABLE A-46. The degrees of characters in $\text{Irr}(2^8.2^5.S_6.2)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96
Number	16	8	48	16	104	16	72	4	72	16	44	8	20

TABLE A-47. The degrees of characters in $\text{Irr}(2^2.2^3.2^5.2^6.S_3)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96
Number	32	16	96	32	208	16	144	4	112	34	64	16	48

TABLE A-48. The degrees of characters in $\text{Irr}(2^2.2^3.2^5.2^6.S_3.2)$

Degree	1	3	6	7	8	14	21	24	28	42
Number	2	4	2	18	4	8	40	4	12	22
Degree	48	56	64	84	112	168	224	336	448	
Number	2	24	2	12	8	40	4	6	2	

TABLE A-49. The degrees of characters in $\text{Irr}(2^8.2^6.L_3(2))$

Degree	1	3	6	7	8	14	16	21	28	42
Number	4	8	4	36	4	16	1	80	24	44
Degree	48	56	84	96	112	128	168	224	336	448
Number	2	36	24	1	15	1	56	9	18	4

TABLE A-50. The degrees of characters in $\text{Irr}(2^8.2^6.L_3(2).2)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96
Number	32	40	32	44	104	46	76	36	58	40	32	8	20

TABLE A-51. The degrees of characters in $\text{Irr}(2^8.2^5.2^3.S_3)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96
Number	64	80	64	88	208	84	152	74	108	64	58	20	42

TABLE A-52. The degrees of characters in $\text{Irr}(2^8.2^5.2^3.S_3.2)$

Degree	1	2	3	4	6	8	9	12	16	18
Number	8	8	24	10	20	14	32	44	5	36
Degree	24	32	36	48	64	72	96	144	192	288
Number	26	6	50	30	3	16	20	25	1	2

TABLE A-53. The degrees of characters in $\text{Irr}(2^8.2^3.2^4.(S_3 \times S_3))$

Degree	1	2	3	4	6	8	9	12	16	18	24
Number	16	16	48	20	40	20	64	88	8	72	52
Degree	32	36	48	64	72	96	128	144	192	288	
Number	5	100	56	4	24	33	1	52	4	4	

TABLE A-54. The degrees of characters in $\text{Irr}(2^8.2^3.2^4.(S_3 \times S_3).2)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96
Number	8	4	56	24	60	28	96	8	60	8	56	4	20

TABLE A-55. The degrees of characters in $\text{Irr}(2^8.2^3.2^4.2.S_3)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96	128	192
Number	16	8	112	48	120	48	192	14	80	9	118	6	33	1	2

TABLE A-56. The degrees of characters in $\text{Irr}(2^8.2^3.2^4.2.S_3.2)$

Degree	1	2	4	8	16	32	64
Number	64	144	184	136	96	60	8

TABLE A-57. The degrees of characters in $\text{Irr}(2^8.2^5.2^3.2)$

Degree	1	2	4	8	16	32	64
Number	128	288	368	224	164	114	20

TABLE A-58. The degrees of characters in $\text{Irr}(2^8.2^5.2^3.2.2)$

Degree	1	21	45	55	77	99	154	210	231	330
Number	2	2	4	2	2	2	2	2	2	2
Degree	352	385	560	616	672	693	770	990	1155	1232
Number	1	6	1	4	2	2	2	4	4	1
Degree	1980	2112	2310	2640	3465	3520	4620	4928	5280	5544
Number	2	1	8	2	4	2	2	2	1	4
Degree	6160	6720	6930	7392	8064	9856	12320			
Number	2	5	4	3	4	2	2			

TABLE A-59. The degrees of characters in $\text{Irr}(2^{11}.M_{22}.2)$

Degree	1	21	45	55	77	99	154	210	231	330
Number	4	4	8	4	4	4	4	4	4	4
Degree	352	385	560	616	693	770	990	1155	1232	1344
Number	2	12	2	8	4	4	8	8	2	1
Degree	1980	2112	2310	2640	3465	3520	4620	4928	5280	5544
Number	4	2	16	4	8	4	4	4	2	8
Degree	6160	6720	6930	7392	9856	12320	13440	14784	16128	
Number	4	2	8	2	4	4	2	1	2	

TABLE A-60. The degrees of characters in $\text{Irr}(2^{11}.M_{22}.2.2)$

Degree	1	4	5	6	10	15	20	30	32	40	60
Number	4	4	8	2	10	20	4	12	4	16	12
Degree	80	96	120	128	160	192	240	320	384	480	640
Number	12	8	32	4	14	6	12	12	6	9	4

TABLE A-61. The degrees of characters in $\text{Irr}(2^{11}.2^4.2.S_5)$

Degree	1	4	5	6	10	15	20	30	32	40	60	80
Number	8	8	16	4	20	40	8	24	8	32	24	24
Degree	96	120	128	160	192	240	320	384	480	640	768	960
Number	16	64	8	24	4	24	25	6	14	8	2	1

TABLE A-62. The degrees of characters in $\text{Irr}(2^{11}.2^4.2.S_5.2)$

Degree	1	6	10	15	20	24	30	32	40	60
Number	4	4	2	8	6	4	4	4	8	6
Degree	64	80	81	90	120	135	160	192	216	240
Number	4	6	4	2	8	8	3	4	8	12
Degree	270	320	405	480	540	640	768	810	864	960
Number	4	6	8	20	8	14	4	8	9	10
Degree	1080	1296	1440	1920	2048	2560	2592	2880	3456	4320
Number	12	4	4	7	4	2	6	2	1	1

TABLE A-63. The degrees of characters in $\text{Irr}(2^2.2^{10}.U_4(2).2)$

Degree	1	6	10	15	20	24	30	32	40	60	64
Number	8	8	4	16	12	8	8	8	16	12	8
Degree	80	81	90	120	135	160	192	216	240	270	320
Number	12	8	4	16	16	2	8	16	24	8	13
Degree	405	480	540	640	768	810	864	960	1080	1280	1296
Number	16	40	16	20	8	16	18	20	24	2	8
Degree	1440	1920	2048	2560	2592	2880	3456	4320	5184		
Number	8	14	8	4	8	4	2	2	1		

TABLE A-64. The degrees of characters in $\text{Irr}(2^2.2^{10}.U_4(2).2.2)$

Degree	1	5	9	10	15	16	30	45	60	80	90	120	144
Number	4	8	4	4	8	6	8	8	10	8	12	8	4
Degree	160	180	192	240	256	320	360	480	576	720	768	960	1440
Number	6	26	2	10	2	4	12	10	4	10	2	8	1

TABLE A-65. The degrees of characters in $\text{Irr}(2^{11}.2^4.S_6)$

Degree	1	5	9	10	15	16	30	45	60	80	90	120	144	160
Number	8	16	8	8	16	12	16	16	20	16	24	16	8	12
Degree	180	192	240	256	320	360	480	576	720	768	960	1440	1920	
Number	52	4	20	4	8	24	12	8	20	4	10	2	2	

TABLE A-66. The degrees of characters in $\text{Irr}(2^{11}.2^4.S_6.2)$

Degree	1	2	5	9	10	16	18	20	32	45
Number	4	2	8	4	8	6	2	2	3	8
Degree	60	80	90	120	135	144	160	180	192	240
Number	8	8	8	12	8	4	14	10	2	14
Degree	256	270	288	320	360	384	480	512	540	576
Number	2	4	2	10	4	1	9	1	16	4
Degree	640	720	768	960	1080	1152	1440	1536	1920	2880
Number	1	8	2	9	4	2	9	1	2	1

TABLE A-67. The degrees of characters in $\text{Irr}(2^{6+8}.(S_3 \times S_6))$

Degree	1	2	5	9	10	16	18	20	32	45
Number	8	4	16	8	16	12	4	4	6	16
Degree	60	80	90	120	135	144	160	180	192	240
Number	16	16	16	24	16	8	20	20	4	28
Degree	256	270	288	320	360	384	480	512	540	576
Number	4	8	4	14	8	2	18	2	32	8
Degree	640	720	768	960	1080	1152	1440	1536	1920	2880
Number	4	16	4	10	8	4	18	2	6	2

TABLE A-68. The degrees of characters in $\text{Irr}(2^{6+8}.(S_3 \times S_6).2)$

Degree	1	2	3	4	6	8	9	12	16	18	24	32	36
Number	8	8	8	10	8	8	16	10	18	8	20	24	32
Degree	48	64	72	96	128	144	192	256	288	384	512	576	
Number	28	18	24	35	13	8	14	8	12	3	2	2	

TABLE A-69. The degrees of characters in $\text{Irr}(2^2.2^{10}.2.2^4.(S_3 \times S_3))$

Degree	1	2	3	4	6	8	9	12	16	18	24	32	36
Number	16	16	16	20	16	16	32	20	36	16	40	48	64
Degree	48	64	72	96	128	144	192	256	288	384	512	576	
Number	56	36	48	62	26	16	30	16	24	6	4	4	

TABLE A-70. The degrees of characters in $\text{Irr}(2^2.2^{10}.2.2.2^4.(S_3 \times S_3).2)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96	128	192	256
Number	8	4	24	8	20	4	44	16	56	16	40	10	43	8	16	4

TABLE A-71. The degrees of characters in $\text{Irr}(2^{11}.2^2.2^4.2.S_3)$

Degree	1	2	3	4	6	8	12	16	24
Number	16	8	48	16	40	8	88	32	112
Degree	32	48	64	96	128	192	256	384	
Number	32	80	20	78	16	26	8	2	

TABLE A-72. The degrees of characters in $\text{Irr}(2^{11}.2^2.2^4.2.S_3.2)$

Degree	1	23	45	231	252	253	483	759
Number	1	1	2	2	1	1	1	1
Degree	770	990	1035	1265	1288	1771	2024	2277
Number	2	2	3	1	2	1	1	1
Degree	3312	3520	5313	5544	5796	10395	10626	11385
Number	1	1	2	1	1	1	1	1
Degree	15180	15939	21252	26565	28336	34155	41216	42504
Number	1	3	1	1	1	4	1	1
Degree	48576	53130	57960	68310	69552	70840	79695	85008
Number	1	1	2	1	2	2	3	2
Degree	91080	127512	141680	154560	159390	185472	226688	239085
Number	1	2	1	2	1	2	2	2

TABLE A-73. The degrees of characters in $\text{Irr}(2^{11}.M_{24})$

Degree	1	23	45	231	252	253	483	759
Number	2	2	4	4	2	2	2	2
Degree	770	990	1035	1265	1771	2024	2277	2576
Number	4	4	6	2	2	2	2	1
Degree	3312	3520	5313	5544	5796	10395	10626	11385
Number	2	2	4	2	2	2	2	2
Degree	15180	15939	21252	26565	28336	34155	41216	42504
Number	2	6	2	2	2	8	2	2
Degree	48576	53130	68310	79695	91080	115920	139104	141680
Number	2	2	2	6	2	1	1	3
Degree	159390	170016	239085	255024	309120	370944	453376	
Number	2	1	4	1	1	1	1	

TABLE A-74. The degrees of characters in $\text{Irr}(2^{12}.M_{24}.2)$

Degree	1	2	20	21	40	42	45	64	84	90
Number	2	1	2	2	1	1	4	2	2	2
Degree	105	126	128	168	210	280	315	360	420	560
Number	4	6	1	3	5	2	2	2	4	3
Degree	630	840	945	1008	1080	1120	1260	1512	1680	1890
Number	1	7	2	2	4	1	2	2	2	4
Degree	2160	2240	2520	2688	2880	4032	4480	5040	6048	
Number	2	2	3	1	2	2	1	2	1	

TABLE A-75. The degrees of characters in $\text{Irr}(2^{11}.L_3(4).S_3)$

Degree	1	2	22	44	168	231	252	385	440
Number	2	1	2	1	2	2	2	2	2
Degree	462	504	528	560	616	770	880	1120	1232
Number	1	1	2	2	2	1	1	1	1
Degree	1386	1540	1848	2376	2772	3080	3465	3520	3696
Number	2	5	2	2	1	1	2	2	2
Degree	4620	4928	5544	6160	6930	7040	7392	8064	9240
Number	2	2	2	3	2	1	2	2	3
Degree	9856	11088	11264	12320	13860	14784	16128	16632	18480
Number	1	1	2	3	3	2	1	2	2
Degree	18711	20160	20790	22528	23328	24640	27720	29568	31185
Number	4	1	3	1	2	2	3	3	2
Degree	32768	33792	36960	37422	40095	40824	41580	47520	49280
Number	2	2	3	4	2	2	3	2	1
Degree	51030	55440	64152	65536	66528	73920	74844	80190	83160
Number	3	2	2	1	2	3	1	1	2
Degree	90720	98304	133056	147840					
Number	2	2	2	1					

TABLE A-76. The degrees of characters in $\text{Irr}(2^2.U_6(2).S_3)$

Degree	1	2	6	10	12	15	16	20	24	30
Number	2	1	2	3	1	4	2	5	2	4
Degree	32	40	48	60	64	80	81	90	96	120
Number	1	1	3	6	2	3	2	3	2	7
Degree	128	135	160	162	192	240	270	288	320	360
Number	1	4	3	1	1	9	4	2	5	6
Degree	384	480	540	640	648	720	768	810	960	1024
Number	2	6	5	1	4	11	1	2	13	2
Degree	1080	1152	1215	1280	1296	1440	1620	1920	2048	2160
Number	4	2	4	3	2	13	1	3	1	2
Degree	2592	2880	3072	3240	3840	3888	4320			
Number	5	3	2	4	1	4	1			

TABLE A-77. The degrees of characters in $\text{Irr}((2^2 \times 2^{1+8}).U_4(2).S_3)$

Degree	1	2	4	5	6	8	10	15	16	20	30
Number	2	1	2	4	3	1	9	6	2	4	3
Degree	32	40	45	48	60	64	80	90	96	120	128
Number	1	1	4	2	4	2	4	4	3	16	1
Degree	160	192	240	288	320	360	480	640	720	960	1152
Number	9	2	17	5	4	14	8	1	4	2	1

TABLE A-78. The degrees of characters in $\text{Irr}((2^2 \times 2^{1+8}):2^4.A_5.S_3)$

Degree	1	2	4	5	6	8	10	12	16	20	30	40	45
Number	4	4	5	4	6	4	4	3	1	5	2	10	4
Degree	48	60	80	90	96	120	135	160	180	192	240	288	320
Number	4	8	4	4	2	12	4	8	9	4	19	2	12
Degree	360	384	480	540	576	640	720	960	1080	1280	1440		
Number	4	2	12	4	1	6	4	1	8	1	5		

TABLE A-79. The degrees of characters in $\text{Irr}(2^{6+8}.(S_3 \times S_5).3)$

Degree	1	2	3	4	6	8	9	12	16	18
Number	4	10	4	8	6	10	4	9	8	4
Degree	24	27	32	36	48	64	72	96	108	128
Number	6	4	10	9	19	8	14	26	8	10
Degree	144	192	216	256	288	384	432	576	768	864
Number	17	19	8	4	8	6	8	1	1	1

TABLE A-80. The degrees of characters in $\text{Irr}((2^2 \times 2^{1+8}).2.2^4.(S_3 \times S_3).3)$

Degree	1	2	3	4	6	8	9	12	16	18	24
Number	4	8	8	4	8	8	4	14	4	4	12
Degree	32	36	48	64	72	96	128	144	192	288	384
Number	8	8	21	4	22	21	8	20	10	9	2

TABLE A-81. The degrees of characters in $\text{Irr}((2^2 \times 2^{1+8}).2^4.2^2.S_3.3)$

Degree	1	2	4	5	6	8	10	15	20	30	40	45	48	60
Number	4	2	4	4	6	2	2	4	4	6	8	4	4	10
Degree	90	120	160	180	192	240	288	320	360	480	640	720	1440	
Number	4	14	8	8	4	15	2	8	10	3	2	8	1	

TABLE A-82. The degrees of characters in $\text{Irr}(2^{11}.2^4.A_5.S_3)$

Degree	1	5	6	9	10	12	15	16	18	30
Number	2	4	2	2	2	1	4	1	3	5
Degree	45	60	72	90	108	135	180	270	288	360
Number	8	1	2	8	1	12	5	4	4	10
Degree	384	540	576	640	720	768	1080	1152	1280	1440
Number	2	4	1	4	4	1	16	4	1	8
Degree	1536	1728	1920	2160	2304	2560	2880	3072	3840	
Number	2	4	2	6	4	4	6	1	5	

TABLE A-83. The degrees of characters in $\text{Irr}(2^{11}.2^6.(3 \times A_6).2)$

Degree	1	5	6	9	10	12	15	16	18	30
Number	4	8	4	4	4	2	8	2	6	10
Degree	45	60	72	90	108	135	180	270	360	384
Number	16	2	4	16	2	24	10	8	12	4
Degree	540	576	720	768	1080	1280	1440	1536	1920	2160
Number	8	4	6	2	24	4	9	4	4	10
Degree	2304	2560	2880	3072	3456	3840	4320	5120	5760	7680
Number	10	4	10	2	2	2	1	1	1	2

TABLE A-84. The degrees of characters in $\text{Irr}(2^{11}.2^6.(3 \times A_6).2.2)$

Degree	1	21	30	35	42	90	140	189	210
Number	2	2	1	4	1	2	2	2	5
Degree	280	315	378	420	560	630	672	720	729
Number	4	4	2	3	3	1	1	2	2
Degree	768	840	896	1260	1280	1458	1512	1701	1890
Number	2	1	2	1	3	1	1	2	1
Degree	2016	2268	3584	3780	4480	5670	7560	7680	8064
Number	2	2	4	1	6	4	3	2	2
Degree	8505	8960	9072	10080	10752	11340	12096	13608	15309
Number	4	1	2	2	1	2	1	4	2
Degree	15360	16128	17010	20160	22680	24192	25515	26880	30240
Number	1	1	2	3	3	2	4	2	1
Degree	30618	32256	34020	34560	35840	40320	43008	49152	51030
Number	2	4	1	4	2	10	1	1	2
Degree	53760	57344	60480	76545	80640	81920	107520		
Number	1	2	5	4	4	1	2		

TABLE A-85. The degrees of characters in $\text{Irr}(2^{1+12}.3.U_4(3):2)$

Degree	1	21	30	35	42	90	140	189	210
Number	4	4	2	8	2	4	4	4	10
Degree	315	378	420	560	630	672	729	768	840
Number	8	4	6	4	2	2	4	4	2
Degree	896	1120	1260	1280	1440	1458	1512	1701	1890
Number	4	1	2	2	1	2	2	4	2
Degree	2016	2268	2560	3584	3780	4480	5670	7560	8064
Number	4	4	1	8	2	4	8	6	4
Degree	8505	8960	9072	10080	10752	11340	12096	15309	15360
Number	8	4	4	4	2	4	2	4	3
Degree	16128	17010	20160	22680	24192	25515	26880	27216	30240
Number	2	4	2	6	4	8	4	2	2
Degree	30618	32256	34020	35840	40320	43008	49152	51030	53760
Number	4	8	2	4	13	2	2	4	2
Degree	57344	60480	69120	76545	80640	81920	107520	120960	161280
Number	4	6	2	8	6	2	4	1	1

TABLE A-86. The degrees of characters in $\text{Irr}(2^{1+12}.3U_4(3):2.2)$

Degree	1	2	3	6	8	9	12	16	18	24	27
Number	4	8	8	8	2	4	13	8	4	14	4
Degree	32	36	48	54	72	81	96	108	128	144	162
Number	8	9	13	18	6	8	8	16	2	6	16
Degree	192	216	243	256	288	324	384	486	576	648	768
Number	9	12	4	4	4	10	4	2	5	2	1

TABLE A-87. The degrees of characters in $\text{Irr}(2^3 \cdot 2^8 \cdot 3 \cdot (S_3 \times S_3 \times S_3) : S_3)$

Degree	1	2	3	4	6	8	9	12	16	18	24	27	32
Number	8	8	16	2	16	4	8	22	12	8	21	8	9
Degree	36	48	54	64	72	81	96	108	128	144	162	192	216
Number	18	24	28	2	12	16	17	30	4	12	32	14	17
Degree	243	256	288	324	384	432	486	512	576	648	768		
Number	8	4	8	20	9	2	4	1	10	4	2		

TABLE A-88. The degrees of characters in $\text{Irr}(2^3 \cdot 2^8 \cdot 3 \cdot (S_3 \times S_3 \times S_3) : S_3 \cdot 2)$

Degree	1	2	3	6	28	50	56	84	100	105
Number	2	4	2	1	2	2	4	2	4	2
Degree	150	168	175	210	252	300	315	350	504	525
Number	2	1	2	1	2	3	2	6	1	4
Degree	600	630	700	756	900	972	1050	1260	1400	1575
Number	4	2	6	2	2	2	7	1	6	2
Degree	1701	1800	1890	1944	2100	2520	2800	2916	3150	3200
Number	2	1	2	4	5	2	4	2	3	2
Degree	3402	4032	4096	4200	4725	5040	5103	5832	6075	6300
Number	1	2	2	6	2	1	2	1	2	5
Degree	6400	6720	6804	7560	8064	8192	8400	8505	9450	9600
Number	4	2	2	2	1	4	5	2	3	2
Degree	12096	12150	12288	12600	13440	13608	14175	17010	18225	18900
Number	2	4	2	3	1	1	2	1	2	2
Degree	19200	20160	20412	24576	25200	25515	36450			
Number	1	2	2	1	1	2	1			

TABLE A-89. The degrees of characters in $\text{Irr}((A_4 \times O_8^+(2):3):2)$

Degree	1	2	3	4	6	28	50	56	84	100
Number	4	4	4	1	2	4	4	4	4	4
Degree	105	112	150	168	175	200	210	252	300	315
Number	4	1	4	2	4	1	2	4	6	4
Degree	350	504	525	600	630	700	756	900	972	1050
Number	8	2	8	4	4	9	4	4	4	10
Degree	1200	1260	1400	1575	1701	1800	1890	1944	2100	2520
Number	1	2	9	4	4	2	4	4	11	4
Degree	2800	2916	3150	3200	3402	3888	4032	4096	4200	4725
Number	5	4	6	4	2	1	4	4	12	4
Degree	5040	5103	5600	5832	6075	6300	6400	6720	6804	7560
Number	2	4	1	2	4	10	4	4	4	4
Degree	8064	8192	8400	8505	9450	9600	12096	12150	12288	12600
Number	2	4	6	4	6	4	4	4	4	6
Degree	12800	13440	13608	14175	16384	16800	17010	18225	18900	19200
Number	1	2	2	4	1	1	2	4	4	2
Degree	20160	20412	24300	24576	25200	25515	36450			
Number	4	4	1	2	2	4	2			

TABLE A-90. The degrees of characters in $\text{Irr}((A_4 \times O_8^+(2):3):2.2)$

Degree	1	2	3	6	7	8	9	12	14	16	18	21
Number	2	1	6	4	6	2	4	1	11	1	2	10
Degree	24	28	42	56	63	84	112	126	168	252	336	504
Number	2	12	16	14	4	22	5	6	16	9	1	2

TABLE A-91. The degrees of characters in $\text{Irr}(2^8.2^3.(L_3(2) \times S_3))$

Degree	1	2	3	6	7	8	9	12	14	16	18	21	24
Number	4	2	12	8	12	4	8	2	14	2	4	20	4
Degree	28	42	56	63	84	112	126	168	224	252	336	504	
Number	22	24	21	8	42	8	12	25	1	18	4	4	

TABLE A-92. The degrees of characters in $\text{Irr}(2^8.2^3.(L_3(2) \times S_3).2)$

Degree	1	2	3	4	6	9	12	16	18
Number	8	14	16	5	28	8	50	8	14
Degree	24	32	36	48	64	72	96	144	192
Number	26	14	25	14	5	10	6	1	1

TABLE A-93. The degrees of characters in $\text{Irr}(2^3.2^8.2^2.(S_3 \times S_3))$

Degree	1	2	3	4	6	8	9	12	16	18
Number	16	20	32	8	48	1	16	66	16	28
Degree	24	32	36	48	64	72	96	128	144	192
Number	45	20	50	28	8	20	13	1	2	2

TABLE A-94. The degrees of characters in $\text{Irr}(2^3.2^8.2^2.(S_3 \times S_3).2)$

Degree	1	2	3	4	6	8	12	16	24	32	48	96
Number	16	36	16	62	20	58	34	37	30	10	14	2

TABLE A-95. The degrees of characters in $\text{Irr}(2^3.2^8.2^3.S_3)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96
Number	32	56	32	88	40	94	68	58	60	18	28	2	4

TABLE A-96. The degrees of characters in $\text{Irr}(2^3.2^8.2^3.S_3.2)$

Degree	1	2	3	4	6	8	9	12	16	18	24	36	48	72	144
Number	4	4	16	13	26	24	12	33	9	10	44	14	22	20	4

TABLE A-97. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.(S_3 \times S_3))$

Degree	1	2	3	4	6	8	9	12	16	18	24	32	36	48	72	96	144
Number	8	8	32	26	36	32	24	62	14	20	74	2	28	32	40	4	8

TABLE A-98. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.(S_3 \times S_3).2)$

Degree	1	2	3	4	6	8	9	12	16	18
Number	4	10	8	8	14	10	12	21	4	12
Degree	24	27	36	48	54	72	108	144	216	
Number	28	8	23	19	4	26	8	8	8	

TABLE A-99. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.(S_3 \times S_3).3)$

Degree	1	2	3	4	6	8	9	12	16	18	24
Number	8	12	16	14	20	13	24	40	6	24	49
Degree	27	32	36	48	54	72	96	108	144	216	
Number	16	1	46	24	8	52	4	16	16	16	

TABLE A-100. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.(S_3 \times S_3).3.2)$

Degree	1	2	3	4	6	8	9	12	16	18	24	32	36	48	72	96	144
Number	8	18	16	12	24	26	8	35	24	14	34	8	17	19	12	4	4

TABLE A-101. The degrees of characters in $\text{Irr}(2^3.2^8.2^3.3^2.2)$

Degree	1	2	3	4	6	8	9	12	16	18	24	32	36	48	64	72	96	144
Number	16	20	32	24	48	37	16	66	32	28	69	13	34	38	2	24	8	8

TABLE A-102. The degrees of characters in $\text{Irr}(2^3.2^8.2^3.3^2.2.2)$

Degree	1	2	3	7	14	20	21	28	35	40	42
Number	2	1	2	2	3	2	4	7	6	1	6
Degree	56	60	63	64	70	84	90	105	112	126	128
Number	5	2	2	2	8	6	3	6	1	1	1
Degree	140	168	192	210	252	270	280	315	420	448	504
Number	17	2	2	7	4	1	9	4	16	2	2
Degree	560	630	756	840	896	945	1260	1344	1890		
Number	2	9	4	5	1	4	2	2	1		

TABLE A-103. The degrees of characters in $\text{Irr}((A_4 \times 2^6:A_8).2)$

Degree	1	2	3	7	14	20	21	28	35	40	42
Number	4	2	4	4	6	4	8	14	12	2	8
Degree	56	60	63	64	70	84	90	105	112	126	128
Number	10	4	4	4	12	13	2	12	2	2	2
Degree	140	168	180	192	210	252	270	280	315	420	448
Number	27	4	1	4	14	8	2	20	8	32	4
Degree	504	560	630	756	840	896	945	1260	1344	1890	
Number	4	4	14	8	10	2	8	5	4	2	

TABLE A-104. The degrees of characters in $\text{Irr}((A_4 \times 2^6:A_8).2.2)$

Degree	1	3	6	7	8	9	14	18	21	24	28	42	56	63	84	126	168	252
Number	3	7	3	21	3	2	9	1	25	1	24	15	12	6	32	4	4	8

TABLE A-105. The degrees of characters in $\text{Irr}(2^8.2^3.(L_3(2) \times 3))$

Degree	1	2	3	6	7	8	9	12	14	16	18
Number	2	1	6	4	14	2	4	1	13	1	2
Degree	21	24	28	42	56	63	84	112	126	168	252
Number	26	2	19	20	16	12	36	4	8	16	16

TABLE A-106. The degrees of characters in $\text{Irr}(2^8.2^3.(L_3(2) \times 3).2)$

Degree	1	2	3	4	6	8	9	12	18	24	36	72
Number	6	3	44	42	22	21	14	56	7	55	14	16

TABLE A-107. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.(S_3 \times 3))$

Degree	1	2	3	4	6	8	9	12	16	18	24	36	48	72
Number	4	4	32	29	30	28	28	63	7	14	60	28	16	32

TABLE A-108. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.(S_3 \times 3).2)$

Degree	1	2	3	4	6	8	9	12	16	18	24	36	48	72	144
Number	4	4	16	13	26	24	12	33	9	10	44	14	22	20	4

TABLE A-109. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.(S_3 \times S_3))$

Degree	1	2	3	4	6	8	9	12	16	18	24	32	36	48	72	96	144
Number	8	8	32	26	36	32	24	62	14	20	74	2	28	32	40	4	8

TABLE A-110. The degrees of characters in $\text{Irr}(2^4.2^3.2^6.(S_3 \times S_3).2)$

Degree	1	2	3	4	6	8	12	16	24	32	48	96
Number	16	36	16	62	20	58	34	37	30	10	14	2

TABLE A-111. The degrees of characters in $\text{Irr}(2^3.2^8.2^3.S_3)$

Degree	1	2	3	4	6	8	12	16	24	32	48	64	96
Number	32	56	32	88	40	94	68	58	60	18	28	2	4

TABLE A-112. The degrees of characters in $\text{Irr}(2^3.2^8.2^3.S_3.2)$

Degree	1	2	3	4	6	8	9	12	16	18	24	27
Number	8	10	8	16	10	2	8	24	8	26	10	8
Degree	32	36	48	54	64	72	96	108	128	144	192	216
Number	10	42	10	10	16	10	2	14	2	1	8	2

TABLE A-113. The degrees of characters in $\text{Irr}(2^8.2^4.(S_3 \times S_3).S_3)$

Degree	1	2	3	4	6	8	9	12	16	18	24	27
Number	16	12	16	18	20	8	16	48	16	44	20	16
Degree	32	36	48	54	64	72	96	108	128	144	192	216
Number	12	62	20	20	18	26	4	28	8	2	16	4

TABLE A-114. The degrees of characters in $\text{Irr}(2^8.2^4.(S_3 \times S_3).S_3.2)$

Degree	1	2	3	6	9	12	16	18	24	32	36	48	72	96
Number	24	12	32	76	8	48	24	24	15	12	16	8	5	4

TABLE A-115. The degrees of characters in $\text{Irr}(2^3.2^8.2^2.(S_3 \times 3))$

Degree	1	2	3	4	6	9	12	16	18	24	32	36	48	64	72	96
Number	16	16	32	4	64	16	56	16	48	26	16	32	21	4	10	8

TABLE A-116. The degrees of characters in $\text{Irr}(2^3.2^8.2^2.(S_3 \times 3).2)$

Degree	1	2	3	4	6	8	12	16	24	48
Number	48	84	16	84	28	69	28	24	23	8

TABLE A-117. The degrees of characters in $\text{Irr}(2^3.2^8.2^2.6)$

Degree	1	2	3	4	6	8	12	16	24	32	48
Number	32	72	32	84	56	74	56	39	46	8	16

TABLE A-118. The degrees of characters in $\text{Irr}(2^3.2^8.2^2.6.2)$

Degree	1	2	3	6	7	8	9	12	14	16
Number	2	1	6	4	2	2	4	1	1	1
Degree	18	21	24	42	63	84	126	168	252	336
Number	2	10	2	8	8	6	8	6	13	5
Degree	448	504	672	896	1008	1344	1792	2016	2688	4032
Number	4	14	8	4	3	14	1	10	2	2

TABLE A-119. The degrees of characters in $\text{Irr}(2^3.2^6.2^8(S_3 \times L_3(2)))$

Degree	1	2	3	6	7	8	9	12	14	16
Number	4	2	12	8	4	4	8	2	2	2
Degree	18	21	24	42	63	84	126	168	252	336
Number	4	20	4	16	16	12	16	4	26	4
Degree	504	672	896	1008	1344	1792	2016	2688	4032	5376
Number	20	10	6	8	14	3	12	4	6	1

TABLE A-120. The degrees of characters in $\text{Irr}(2^3 \cdot 2^6 \cdot 2^8 (S_3 \times L_3(2)).2)$

Degree	1	3	5	6	7	8	9	10	15	24	27
Number	1	2	2	1	1	3	1	1	4	4	2
Degree	30	35	40	48	54	56	60	63	64	70	72
Number	4	2	2	2	1	2	1	1	2	1	1
Degree	80	105	210	315	420	630	672	840	945	1260	1344
Number	1	4	4	8	1	6	2	2	4	1	1
Degree	1680	1890	2016	2240	2520	2688	3360	3780	4032	4480	5040
Number	4	6	6	6	4	2	2	1	2	4	2
Degree	5376	6048	6720	7560	8064	8960	10080	13440			
Number	1	4	3	2	2	2	2	4			

TABLE A-121. The degrees of characters in $\text{Irr}(2^{3+12} \cdot (A_6 \times L_3(2)))$

Degree	1	3	5	6	7	8	9	10	15	16	27
Number	2	4	4	2	2	2	2	2	8	1	4
Degree	30	35	40	48	54	60	63	70	72	80	96
Number	8	4	4	2	2	2	2	2	2	2	1
Degree	105	112	128	210	315	420	630	672	840	945	1260
Number	8	1	1	8	16	2	12	4	4	8	2
Degree	1344	1680	1890	2016	2240	2520	2688	3360	3780	4032	4480
Number	2	4	12	4	8	8	4	5	2	2	5
Degree	5040	5376	6720	7560	8064	8960	10080	12096	13440	26880	
Number	4	2	6	4	5	5	4	2	4	1	

TABLE A-122. The degrees of characters in $\text{Irr}(2^{3+12} \cdot (A_6 \times L_3(2)).2)$

Degree	1	2	3	5	8	9	10	15	16	18	20
Number	2	1	2	4	4	2	4	8	2	1	1
Degree	24	27	30	45	60	90	135	180	270	288	360
Number	4	2	6	8	1	12	4	4	16	4	6
Degree	384	480	540	576	720	768	864	960	1080	1152	1280
Number	2	2	6	1	6	1	8	12	6	8	6
Degree	1440	1536	1728	1920	2160	2304	2560	2880	3072	3840	5120
Number	6	2	2	10	1	3	4	2	1	3	2

TABLE A-123. The degrees of characters in $\text{Irr}(2^{1+12}.2^4.(S_3 \times A_6))$

Degree	1	2	3	5	9	10	15	16	18
Number	4	2	4	8	4	8	16	2	2
Degree	20	27	30	32	45	48	60	90	135
Number	2	4	12	1	16	2	2	24	8
Degree	180	270	288	360	384	480	540	576	720
Number	8	32	8	12	4	4	12	2	8
Degree	768	960	1080	1152	1280	1440	1536	1728	1920
Number	2	16	12	8	8	13	4	4	14
Degree	2160	2304	2560	2880	3072	3456	3840	4608	5120
Number	2	4	5	4	2	1	8	1	5

TABLE A-124. The degrees of characters in $\text{Irr}(2^{1+12}.2^4.(S_3 \times A_6).2)$

Degree	1	2	3	4	6	9	12	18	24	36	48
Number	4	4	16	1	10	12	5	26	4	22	1
Degree	72	96	144	192	256	288	384	512	576	768	1024
Number	36	4	20	13	4	26	14	4	14	11	1

TABLE A-125. The degrees of characters in $\text{Irr}(2^{11}.2^4.2^4.(S_3 \times S_3))$

Degree	1	2	3	4	6	9	12	18	24	36	48
Number	8	8	32	2	20	24	10	52	8	44	2
Degree	72	144	192	288	384	512	576	768	1024	1152	1536
Number	56	36	4	30	18	6	26	18	3	2	2

TABLE A-126. The degrees of characters in $\text{Irr}(2^{11}.2^4.2^4.(S_3 \times S_3).2)$

Degree	1	5	6	10	15	20	24	27	30	36	40
Number	2	4	2	4	4	2	2	2	6	4	4
Degree	45	54	60	64	72	81	108	135	162	180	216
Number	4	1	2	4	2	6	2	8	2	8	1
Degree	270	320	324	360	384	405	432	540	576	640	648
Number	14	4	4	8	2	2	2	8	2	4	2
Degree	720	810	864	960	1080	1152	1280	1440	1536	1620	1728
Number	6	3	1	4	16	1	2	1	2	6	2
Degree	1920	2160	2560	2592	2880	3240	3456	3840	4096	4320	5184
Number	6	4	4	3	8	5	1	2	2	1	2

TABLE A-127. The degrees of characters in $\text{Irr}(2^{1+12}.2.U_4(2))$

Degree	1	6	10	15	20	24	27	30	36	54	60
Number	4	4	2	8	6	4	4	4	8	2	6
Degree	64	72	80	81	90	108	135	162	180	216	270
Number	8	4	2	4	2	4	8	2	16	2	18
Degree	324	360	384	405	432	540	576	640	648	720	810
Number	9	16	4	4	4	19	4	2	4	12	6
Degree	864	960	1080	1152	1280	1440	1536	1620	1728	1920	2160
Number	2	8	20	2	6	2	4	12	4	4	11
Degree	2592	2880	3240	3456	3840	4096	4320	5120	5184	5760	
Number	2	8	10	2	6	4	2	2	5	2	

TABLE A-128. The degrees of characters in $\text{Irr}(2^{1+12}.2.U_4(2).2)$

Degree	1	34	51	84	119	136	204	357	476	595
Number	1	1	1	1	1	1	2	1	2	3
Degree	714	952	1020	1071	1190	1344	1428	1785	2040	2142
Number	3	1	1	4	3	1	1	2	1	4
Degree	2176	2295	2380	2835	2856	3213	3264	3570	3672	4096
Number	1	3	1	4	5	1	1	3	1	1
Degree	4284	4760	5355	7140	7616	9520	9639	11424	12852	14280
Number	3	5	3	1	2	1	3	1	1	3
Degree	16065	16320	21420	22848	25704	28560	29376	32130	38080	38556
Number	4	1	4	1	3	2	1	2	2	2
Degree	42840	45696	48195	51408	55080	57120	64260	68544	69632	
Number	3	1	1	1	1	1	1	1	1	

TABLE A-129. The degrees of characters in $\text{Irr}(2^8.O_8^-(2))$

Degree	1	34	51	84	119	136	204	357	476
Number	2	2	2	2	2	2	4	2	4
Degree	595	714	952	1020	1071	1190	1344	1428	1785
Number	2	6	2	2	4	3	2	2	4
Degree	2040	2142	2176	2295	2380	2856	3213	3264	3570
Number	2	1	2	2	3	10	2	2	2
Degree	3672	4096	4284	4590	4760	5355	5670	7140	7616
Number	2	2	8	1	6	2	2	3	4
Degree	9520	9639	10710	11424	12852	14280	16065	16320	19278
Number	3	2	1	2	2	6	4	2	1
Degree	21420	22848	25704	28560	29376	32130	38080	38556	42840
Number	8	2	6	4	2	5	4	4	6
Degree	45696	48195	51408	55080	57120	64260	68544	69632	
Number	2	2	2	2	2	2	2	2	

TABLE A-130. The degrees of characters in $\text{Irr}(2^8.O_8^-(2).2)$

Degree	1	3	6	7	8	14	21	24	28	42
Number	3	6	3	9	3	3	8	1	12	7
Degree	56	63	72	84	112	126	144	168	192	224
Number	6	6	2	18	12	3	1	20	1	6
Degree	252	336	448	504	672	896	1008	1344	2016	
Number	6	14	12	12	8	6	9	13	4	

TABLE A-131. The degrees of characters in $\text{Irr}(2^8.2^{3+6}.(L_3(2) \times 3))$

Degree	1	2	3	6	7	8	12	14	16
Number	2	1	4	4	6	2	1	5	1
Degree	21	24	28	42	56	63	72	84	112
Number	8	2	9	8	8	12	4	22	10
Degree	126	144	168	192	224	252	336	448	504
Number	6	2	28	2	8	12	16	10	24
Degree	672	896	1008	1344	1792	2016	2688		
Number	12	8	18	12	2	8	4		

TABLE A-132. The degrees of characters in $\text{Irr}(2^8.2^{3+6}.(L_3(2) \times 3).2)$

Degree	1	2	3	4	5	6	8	10	15	16
Number	4	1	8	4	16	2	1	24	4	4
Degree	20	30	32	40	48	60	64	80	96	120
Number	24	13	5	30	8	24	6	28	10	17
Degree	128	160	192	240	256	320	480	640	960	1280
Number	5	32	4	20	2	22	7	9	2	2

TABLE A-133. The degrees of characters in $\text{Irr}(2^8.2^6.2^4.A_5)$

Degree	1	2	4	5	6	8	10	12	15	16
Number	8	2	8	16	4	2	32	1	8	8
Degree	20	30	32	40	60	64	80	96	120	128
Number	45	18	10	42	42	12	37	4	28	10
Degree	160	192	240	256	320	384	480	640	960	1280
Number	46	5	42	4	42	2	14	20	4	4

TABLE A-134. The degrees of characters in $\text{Irr}(2^8.2^6.2^4.A_5.2)$

Degree	1	2	3	4	5	6	8	9	10	12
Number	2	1	6	2	2	2	1	4	1	2
Degree	15	16	20	30	32	40	45	48	60	64
Number	14	2	6	11	1	7	4	6	14	2
Degree	80	90	96	120	128	144	160	180	192	240
Number	12	9	6	15	1	4	9	12	2	20
Degree	288	320	360	384	480	640	720	960	1440	1920
Number	8	4	9	4	22	1	8	10	4	4

TABLE A-135. The degrees of characters in $\text{Irr}(2^8.2^{1+8}.(S_3 \times A_5))$

Degree	1	2	3	4	5	6	8	10	12	15
Number	4	2	4	4	4	2	2	2	5	12
Degree	16	18	20	30	32	40	45	48	60	64
Number	4	2	4	22	2	12	8	4	29	4
Degree	80	90	96	120	128	160	180	192	240	288
Number	17	10	10	22	2	16	18	5	26	2
Degree	320	360	384	480	576	640	720	960	1440	1920
Number	9	20	8	32	4	2	16	24	8	8

TABLE A-136. The degrees of characters in $\text{Irr}(2^8.2^{1+8}.(S_3 \times A_5).2)$

Degree	1	2	3	4	6	8	9	12	16	18	24	32
Number	6	3	20	6	4	3	6	26	24	17	29	12
Degree	36	48	64	72	96	128	144	192	288	384	576	
Number	20	36	12	20	36	6	24	14	18	24	8	

TABLE A-137. The degrees of characters in $\text{Irr}(2^8.2^{3+6}.2^2.(3 \times S_3))$

Degree	1	2	3	4	6	8	9	12	16	18	24	32	36
Number	4	4	16	5	10	4	12	21	17	26	34	16	34
Degree	48	64	72	96	128	144	192	256	288	384	576	768	
Number	40	12	42	42	8	48	22	2	36	20	16	8	

TABLE A-138. The degrees of characters in $\text{Irr}(2^8.2^{3+6}.2^2.(3 \times S_3).2)$

Degree	1	2	3	4	6	8	12	16	24
Number	24	18	8	30	22	66	38	54	50
Degree	32	48	64	96	128	192	256	384	
Number	39	38	36	47	30	14	12	4	

TABLE A-139. The degrees of characters in $\text{Irr}(2^8.2^{3+6}.D_8.3)$

Degree	1	2	3	4	6	8	12	16	24
Number	16	20	16	26	36	54	70	58	90
Degree	32	48	64	96	128	192	256	384	512
Number	44	79	37	86	32	30	18	8	4

TABLE A-140. The degrees of characters in $\text{Irr}(2^8.2^{3+6}.D_8.S_3)$

Degree	1	2	3	4	6	8	9	12	18	24	36	48
Number	12	6	12	12	18	6	8	20	8	68	20	26
Degree	64	72	96	128	144	192	256	288	384	512	576	
Number	12	34	13	6	18	26	12	25	12	6	4	

TABLE A-141. The degrees of characters in $\text{Irr}(2^8.2^6.2.2^4(3 \times S_3))$

Degree	1	2	3	4	6	8	9	12	16	18	24	36	48
Number	8	8	8	10	16	8	16	30	2	16	60	40	40
Degree	64	72	96	128	144	192	256	288	384	512	576	768	1024
Number	8	64	22	8	37	23	10	42	16	8	10	4	2

TABLE A-142. The degrees of characters in $\text{Irr}(2^8.2^6.2.2^4(3 \times S_3).2)$

Degree	1	7	14	15	20	21	28	30	35	45	56	64
Number	2	2	2	2	2	6	2	1	2	8	2	2
Degree	70	90	105	120	180	210	240	280	315	420	448	560
Number	2	4	6	2	1	9	1	2	4	3	4	4
Degree	630	840	1260	1680	2240	2520	4032	4480	5040	6720	7168	
Number	6	10	4	5	8	12	4	4	5	3	2	

TABLE A-143. The degrees of characters in $\text{Irr}(2^{11}.2^4.A_8)$

Degree	1	7	14	15	20	21	28	30	35	45
Number	4	4	4	4	4	12	4	2	4	16
Degree	56	64	70	90	105	120	180	210	240	280
Number	4	4	4	8	12	4	2	18	2	4
Degree	315	420	448	560	630	840	1260	1680	2240	2520
Number	8	6	8	8	12	12	8	8	16	16
Degree	3360	4032	4480	5040	6720	7168	10080	13440		
Number	1	8	8	8	2	4	1	1		

TABLE A-144. The degrees of characters in $\text{Irr}(2^{11}.2^4.A_8.2)$

Degree	1	2	7	14	20	21	28	35	40	42
Number	2	1	2	3	2	6	3	2	1	3
Degree	45	56	64	70	90	112	128	135	140	210
Number	6	3	2	3	2	1	1	4	1	4
Degree	270	280	315	360	420	448	560	630	840	896
Number	2	6	6	2	4	4	8	2	5	2
Degree	945	1120	1260	1680	1890	2240	2520	3360	4032	4480
Number	4	1	2	4	4	8	9	1	4	8
Degree	5040	6720	7168	7560	8064	8960	13440	14336	15120	
Number	1	5	2	6	2	2	1	1	1	

TABLE A-145. The degrees of characters in $\text{Irr}(2^{6+8}.(S_3 \times A_8))$

Degree	1	2	7	14	20	21	28	35	40	42
Number	4	2	4	6	4	12	6	4	2	6
Degree	45	56	64	70	90	112	128	135	140	210
Number	12	6	4	6	4	2	2	8	2	8
Degree	270	280	315	360	420	448	560	630	840	896
Number	4	4	12	4	8	8	10	4	10	4
Degree	945	1120	1260	1680	1890	2240	2520	3360	4032	4480
Number	8	4	4	8	8	16	10	2	8	16
Degree	5040	6720	7168	7560	8064	8960	13440	14336	15120	
Number	4	2	4	12	4	4	4	2	2	

TABLE A-146. The degrees of characters in $\text{Irr}(2^{6+8} \cdot (S_3 \times A_8) \cdot 2)$

Degree	1	2	3	6	7	8	9	12	14	16	18	21
Number	2	1	6	4	6	2	4	1	5	1	2	10
Degree	24	28	42	56	63	84	112	126	168	224	252	336
Number	2	1	12	6	4	4	3	16	14	6	6	7
Degree	448	504	672	896	1008	1344	1792	2016	2688	4032		
Number	11	12	8	8	6	18	2	2	4	2		

TABLE A-147. The degrees of characters in $\text{Irr}(2^3 \cdot 2^3 \cdot 2^6 \cdot 2^5 (S_3 \times L_3(2)))$

Degree	1	2	3	6	7	8	9	12	14	16	18	21
Number	4	2	12	8	12	4	8	2	10	2	4	20
Degree	24	28	42	56	63	84	112	126	168	224	252	336
Number	4	2	24	4	8	8	4	32	20	5	12	12
Degree	448	504	672	896	1008	1344	1792	2016	2688	4032		
Number	20	24	9	17	12	30	4	4	10	4		

TABLE A-148. The degrees of characters in $\text{Irr}(2^3 \cdot 2^3 \cdot 2^6 \cdot 2^5 (S_3 \times L_3(2)) \cdot 2)$

Degree	1	2	3	6	7	8	12	14	16	21	28
Number	4	1	8	6	12	4	1	15	1	8	9
Degree	42	56	84	112	168	224	336	448	672	896	1344
Number	18	4	18	1	32	8	15	22	10	6	15

TABLE A-149. The degrees of characters in $\text{Irr}(2^{11} \cdot 2^3 \cdot 2^4 \cdot L_3(2))$

Degree	1	2	3	6	7	8	12	14	16	21	28	42
Number	8	2	16	12	24	8	2	30	2	16	18	36
Degree	56	84	112	168	224	336	448	672	896	1344	2688	
Number	8	36	2	48	8	26	30	14	16	24	2	

TABLE A-150. The degrees of characters in $\text{Irr}(2^{11}.2^3.2^4.L_3(2).2)$

Degree	1	2	4	6	8	9	12	16	18	24	27	32
Number	8	12	6	8	7	16	8	8	8	6	8	1
Degree	36	48	54	72	96	108	128	144	192	216	256	288
Number	10	4	12	13	5	24	6	25	17	6	16	2
Degree	384	432	512	576	768	864	1024	1152	1536	1728	2048	2304
Number	10	10	13	9	7	10	6	6	1	2	1	1

TABLE A-151. The degrees of characters in $\text{Irr}(2^{1+12}.2.2^4.(S_3 \times S_3 \times S_3))$

Degree	1	2	4	6	8	9	12	16	18	24	27	32
Number	16	24	12	16	6	32	16	10	16	12	16	4
Degree	36	48	54	72	96	108	128	144	192	216	256	288
Number	20	8	24	18	10	48	4	20	26	12	26	12
Degree	384	432	512	576	768	864	1024	1152	1536	1728	2048	2304
Number	22	20	28	18	6	20	12	12	4	4	2	2

TABLE A-152. The degrees of characters in $\text{Irr}(2^{1+12}.2.2^4.(S_3 \times S_3).2)$

Degree	1	2	3	4	6	8	9	12	16	18	24	36	48
Number	8	8	8	2	16	2	16	14	4	16	18	32	7
Degree	72	96	128	144	192	256	288	384	512	576	768	1024	
Number	24	4	2	40	13	12	20	10	8	17	6	2	

TABLE A-153. The degrees of characters in $\text{Irr}(2^{1+12}.2.2^4.2.(S_3 \times S_3))$

Degree	1	2	3	4	6	8	9	12	16	18	24	36	48	72
Number	16	16	16	4	32	4	32	28	8	32	28	64	12	40
Degree	96	128	144	192	256	288	384	512	576	768	1024	1152	1536	
Number	9	4	46	22	24	33	13	16	30	6	4	2	2	

TABLE A-154. The degrees of characters in $\text{Irr}(2^{1+12}.2.2^4.2.(S_3 \times S_3).2)$

Degree	1	2	3	4	6	8	12	16	24	48	96	128	192	256	384	512
Number	16	20	16	10	36	4	54	1	52	60	42	8	46	22	6	6

TABLE A-155. The degrees of characters in $\text{Irr}(2^{11}.2^2.2^3.2^4.S_3)$

Degree	1	2	3	4	6	8	12	16	24	48	96	128	192	256	384	512
Number	32	40	32	20	72	8	108	2	88	84	62	8	68	30	20	16

TABLE A-156. The degrees of characters in $\text{Irr}(2^{11}.2^2.2^3.2^4.S_3.2)$

Degree	1	2	3	4	6	8	9	12	16	18	24	36	48
Number	8	8	16	2	24	6	8	8	3	24	10	38	29
Degree	72	96	128	144	192	256	288	384	512	576	768	1024	
Number	20	18	6	17	25	11	14	14	8	11	9	2	

TABLE A-157. The degrees of characters in $\text{Irr}(2^{6+8}.2^4.2.(S_3 \times S_3))$

Degree	1	2	3	4	6	8	9	12	16	18	24	32	36	48
Number	16	16	32	4	48	4	16	16	4	48	12	1	76	24
Degree	72	96	128	144	192	256	288	384	512	576	768	1024	1152	1536
Number	40	29	4	34	46	20	28	30	17	18	14	4	1	1

TABLE A-158. The degrees of characters in $\text{Irr}(2^{6+8}.2^4.2.(S_3 \times S_3).2)$

Degree	1	2	300	600	780	1560	2275	2457
Number	2	4	2	4	4	2	2	2
Degree	2808	4550	4914	5616	6825	9450	13650	16380
Number	2	4	1	4	2	2	1	4
Degree	17550	18200	18900	24192	27300	32760	35100	36400
Number	2	4	4	2	2	2	4	8
Degree	48384	54600	70200	87360	109200	122850	139776	140400
Number	4	8	4	4	5	4	2	2
Degree	147420	163800	174720	184275	199017	218700	245700	279552
Number	4	4	2	2	2	2	4	1
Degree	291200	294840	327600	332800	368550	398034	437400	491400
Number	4	2	2	2	4	1	4	8
Degree	531441	552825	568620	582400	665600	698880	716800	786240
Number	2	2	4	8	4	4	4	4
Degree	873600	982800	998400	1062882	1105650	1137240	1257984	1397760
Number	2	5	2	4	1	2	2	4
Degree	1433600	1572480	1747200	1996800	2515968	2795520		
Number	8	2	1	1	1	1		

TABLE A-159. The degrees of characters in $\text{Irr}((3 \times O_8^+(3):3):2)$

Degree	1	2	4	300	600	780	1200	1560
Number	4	4	1	4	4	8	1	4
Degree	2275	2457	2808	4550	4914	5616	6825	9100
Number	4	4	4	4	2	4	4	1
Degree	9450	11232	13650	16380	17550	18200	18900	24192
Number	4	1	2	8	4	8	4	4
Degree	27300	32760	35100	36400	37800	48384	54600	70200
Number	4	4	4	8	1	4	12	9
Degree	72800	87360	96768	109200	122850	139776	140400	147420
Number	2	8	1	7	8	4	4	8
Degree	163800	174720	184275	199017	218400	218700	245700	279552
Number	8	4	4	4	1	4	8	2
Degree	291200	294840	327600	332800	368550	398034	437400	491400
Number	8	4	4	4	4	2	4	12
Degree	531441	552825	568620	582400	665600	698880	716800	737100
Number	4	4	8	8	4	8	8	1
Degree	786240	873600	874800	982800	998400	1062882	1105650	1137240
Number	8	4	1	7	4	4	2	4
Degree	1164800	1257984	1331200	1397760	1433600	1572480	1747200	1965600
Number	2	4	1	8	8	4	2	1
Degree	1996800	2125764	2515968	2795520	2867200			
Number	2	1	2	2	2			

TABLE A-160. The degrees of characters in $\text{Irr}(S_3 \times O_8^+(3):S_3)$

Degree	1	2	14	28	64	78	91	104	128	156
Number	2	4	2	4	4	2	6	2	8	4
Degree	168	182	208	273	336	364	448	546	728	729
Number	2	16	4	4	4	8	4	12	4	2
Degree	819	832	896	1092	1456	1458	1638	1664		
Number	2	2	8	8	8	4	4	4		

TABLE A-161. The degrees of characters in $\text{Irr}(3^2:2 \times G_2(3))$

Degree	1	2	4	14	28	56	64	78	91	104
Number	4	4	1	4	4	1	8	4	12	4
Degree	128	156	168	182	208	256	273	312	336	364
Number	8	4	4	20	4	2	8	1	4	11
Degree	416	448	546	672	728	729	819	832	896	1092
Number	1	8	16	1	10	4	4	4	8	10
Degree	1456	1458	1638	1664	1792	2184	2912	2916	3276	3328
Number	8	4	4	4	2	2	2	1	1	1

TABLE A-162. The degrees of characters in $\text{Irr}(3^2:2^2 \times G_2(3))$

Degree	1	2	3	4	6	8	12	16	18	24	32	36	48	96
Number	4	14	4	14	14	12	18	26	2	20	20	4	22	12

TABLE A-163. The degrees of characters in $\text{Irr}(3^2:2 \times (3^2 \times 3^{1+2}):2S_4)$

Degree	1	2	3	4	6	8	12	16	18	24	32	36	48	64	72	96	192
Number	8	20	8	18	20	23	26	37	4	31	24	4	31	5	1	16	3

TABLE A-164. The degrees of characters in $\text{Irr}(3^2:2^2 \times (3^2 \times 3^{1+2}):2S_4)$

Degree	1	2	26	39	52	65	78	90	104
Number	2	1	4	2	4	4	1	2	1
Degree	130	180	234	260	351	390	416	468	520
Number	2	1	8	12	2	2	4	6	15
Degree	585	702	729	780	832	936	1040	1170	1280
Number	4	1	2	3	5	1	8	6	6
Degree	1404	1458	1560	2080	2340	2808	3510	4680	5616
Number	4	1	10	13	11	2	8	10	4
Degree	6240	7020	8320	9360	10530	11232	12480	14040	14976
Number	8	12	6	6	4	2	7	11	4
Degree	16640	18720	18954	21060	28080	29952	37440	37908	
Number	12	9	4	5	2	2	2	2	

TABLE A-165. The degrees of characters in $\text{Irr}(3^7:L_4(3):2)$

Degree	1	2	26	39	52	65	78	90	104	130
Number	4	2	8	4	8	8	2	4	2	4
Degree	180	234	260	351	390	416	468	520	585	702
Number	2	16	24	4	4	8	12	18	8	2
Degree	729	780	832	936	1040	1170	1280	1404	1458	1560
Number	4	6	6	2	19	12	4	8	2	8
Degree	1664	2080	2340	2560	2808	3120	3510	4160	4680	5616
Number	1	14	18	2	4	3	16	3	17	8
Degree	6240	7020	8320	9360	10530	11232	12480	14040	14976	16640
Number	16	24	12	13	8	4	10	18	8	12
Degree	18720	18954	21060	24960	28080	29952	33280	37440	37908	42120
Number	14	8	6	1	5	4	3	5	4	1

TABLE A-166. The degrees of characters in $\text{Irr}(3^7:L_4(3):2.2)$

Degree	1	12	13	16	26	27	39	52	78
Number	3	3	3	12	45	3	3	36	12
Degree	208	234	468	624	702	1404	1872	2106	
Number	36	45	45	27	51	36	45	12	

TABLE A-167. The degrees of characters in $\text{Irr}(3^7:3^3.L_3(3))$

Degree	1	2	12	13	16	24	26	27	32	39
Number	2	1	2	2	8	1	31	2	4	2
Degree	52	54	78	104	156	208	234	416	468	624
Number	39	1	9	12	4	24	30	12	45	18
Degree	702	936	1248	1404	1872	2106	2808	3744	4212	
Number	34	15	9	41	30	8	12	15	4	

TABLE A-168. The degrees of characters in $\text{Irr}(3^7:3^3.L_3(3).2)$

Degree	1	2	3	4	8	16	18	36	48	54	108	144	162	216	432
Number	6	9	6	3	78	39	81	81	39	63	36	81	12	162	81

TABLE A-169. The degrees of characters in $\text{Irr}(3^7.3^4.3.2S_4)$

Degree	1	2	3	4	6	8	16	18	32	36	48
Number	4	8	4	5	2	53	52	54	13	81	26
Degree	54	72	96	108	144	162	216	288	324	432	864
Number	42	27	13	45	54	8	120	27	4	108	27

TABLE A-170. The degrees of characters in $\text{Irr}(3^7.3^4.3.2S_4.2)$

Degree	1	2	4	6	8	9	12	16	18	24	32	36
Number	4	12	21	6	12	4	12	17	4	8	4	1
Degree	48	64	72	96	128	144	162	192	216	288	324	384
Number	16	12	16	21	17	16	18	36	8	12	36	51
Degree	432	576	648	864	972	1152	1296	1458	1728	2916	3456	
Number	16	14	18	17	27	5	36	6	6	3	1	

TABLE A-171. The degrees of characters in $\text{Irr}(3^7.3^4.2(A_4 \times A_4).2.2)$

Degree	1	2	4	6	8	9	12	16	18	24
Number	8	24	26	4	28	8	10	18	8	20
Degree	32	36	48	64	72	96	128	144	162	192
Number	12	2	32	24	32	38	18	32	36	49
Degree	216	256	288	324	384	432	576	648	768	864
Number	16	4	24	36	48	32	20	45	15	30
Degree	972	1152	1296	1458	1728	1944	2304	2592	2916	3456
Number	18	8	36	12	13	9	1	9	6	2

TABLE A-172. The degrees of characters in $\text{Irr}(3^7.3^4.2(A_4 \times A_4).2.2.2)$

Degree	1	2	3	4	6	8	16	24	48	72	144	162	216	324	432	486
Number	6	45	6	39	12	6	39	72	144	90	45	81	72	81	18	27

TABLE A-173. The degrees of characters in $\text{Irr}(3^7.3^3.3^2.2S_4)$

Degree	1	2	3	4	6	8	12	16	24	32	48	72
Number	4	32	4	41	10	17	4	28	48	13	120	60
Degree	96	144	162	216	288	324	432	486	648	864	972	
Number	48	60	54	48	15	81	36	18	27	6	9	

TABLE A-174. The degrees of characters in $\text{Irr}(3^7.3^3.3^2.2S_4.2)$

Degree	1	2	4	6	12	18	36	54	108	162
Number	12	84	39	78	156	162	81	234	108	162

TABLE A-175. The degrees of characters in $\text{Irr}(3^7.3^4.3^2.2^2)$

Degree	1	2	4	6	8	12	18	24	36	54	72	108	162	216	324
Number	8	60	54	52	13	130	108	52	108	156	27	150	108	36	54

TABLE A-176. The degrees of characters in $\text{Irr}(3^7.3^4.3^2.2^2.2)$

Degree	1	2	4	6	8	12	18	24	36	54	72	108	162	216	324
Number	8	28	46	20	17	58	28	72	88	60	37	126	36	48	72

TABLE A-177. The degrees of characters in $\text{Irr}(3^7.3^4.3^2.2^3)$

Degree	1	2	4	6	8	12	16	18	24	36
Number	16	56	60	40	26	84	4	56	72	96
Degree	48	54	72	108	144	162	216	324	432	648
Number	20	120	54	156	10	72	72	72	12	18

TABLE A-178. The degrees of characters in $\text{Irr}(3^7.3^4.3^2.2^3.2)$

Degree	1	2	3	4	6	8	16	18	32	36	48
Number	4	8	4	5	2	21	44	14	17	51	10
Degree	54	72	96	108	144	162	216	288	324	432	864
Number	18	37	17	39	14	4	51	37	5	90	36

TABLE A-179. The degrees of characters in $\text{Irr}(3^7.3^4.3.2S_4.2)$

Degree	1	2	3	4	6	8	16	18	32	36	48	54	64	72
Number	8	16	8	10	4	42	56	28	26	62	20	36	4	44
Degree	96	108	144	162	192	216	288	324	432	576	648	864	1728	
Number	18	54	38	8	4	96	34	6	111	10	1	54	9	

TABLE A-180. The degrees of characters in $\text{Irr}(3^7.3^4.3.2S_4.2.2)$

Degree	1	2	4	6	8	9	12	16	18	27	32
Number	4	10	4	8	4	4	4	10	6	8	4
Degree	36	48	54	96	108	128	162	256	288	324	384
Number	5	8	12	4	1	4	6	10	8	12	4
Degree	486	512	576	768	864	972	1152	1296	1458	1536	1728
Number	12	4	16	18	12	9	13	6	6	8	16
Degree	2304	2592	2916	3456	3888	4374	4608	5184	6912	7776	8748
Number	8	16	12	6	12	8	6	2	8	9	7

TABLE A-181. The degrees of characters in $\text{Irr}((3 \times 3^{1+8}).2(A_4 \times A_4 \times A_4).2:3:2)$

Degree	1	2	4	6	8	9	12	16	18	27	32
Number	8	12	6	16	9	8	8	12	12	16	6
Degree	36	48	54	64	72	96	108	128	162	256	288
Number	6	16	16	1	1	8	4	8	12	12	16
Degree	324	384	486	512	576	648	768	864	972	1024	1152
Number	12	8	24	6	32	3	28	24	14	1	22
Degree	1296	1458	1536	1728	1944	2304	2592	2916	3072	3456	3888
Number	12	12	14	24	1	17	20	12	1	14	24
Degree	4374	4608	5184	5832	6912	7776	8748	9216	13824	15552	17496
Number	16	8	7	3	8	14	10	1	2	1	1

TABLE A-182. The degrees of characters in $\text{Irr}((3 \times 3^{1+8}).2(A_4 \times A_4 \times A_4).2:3:2.2)$

Degree	1	2	3	4	6	8	16	18	32	36	48
Number	4	8	4	5	2	21	44	14	17	51	10
Degree	54	72	96	108	144	162	216	288	324	432	864
Number	18	37	17	39	14	4	51	37	5	90	36

TABLE A-183. The degrees of characters in $\text{Irr}(3^3.3^3.3^6.(2S_4 \times 2))$

Degree	1	2	3	4	6	8	16	18	32	36	48	54	64	72
Number	8	16	8	10	4	42	56	28	26	62	20	36	4	44
Degree	96	108	144	162	192	216	288	324	432	576	648	864	1728	
Number	18	54	38	8	4	96	34	6	111	10	1	54	9	

TABLE A-184. The degrees of characters in $\text{Irr}(3^3.3^3.3^6.(2S_4 \times 2).2)$

Degree	1	2	12	13	16	24	26	27	32	39
Number	2	1	2	2	8	1	15	2	4	2
Degree	52	54	78	104	156	208	234	416	468	624
Number	27	1	5	16	5	8	6	16	27	6
Degree	702	936	1248	1404	1872	2106	2808	3744	4212	
Number	14	21	12	34	6	4	15	21	5	

TABLE A-185. The degrees of characters in $\text{Irr}(3^7.3^3.(L_3(3) \times 2))$

Degree	1	2	12	13	16	24	26	27	32	39	52	54
Number	4	2	4	4	16	2	30	4	8	4	38	2
Degree	78	104	156	208	234	312	416	468	624	702	832	936
Number	10	20	6	20	12	1	16	30	12	28	4	24
Degree	1248	1404	1872	2106	2496	2808	3744	4212	5616	7488	8424	
Number	12	48	18	8	3	23	15	6	3	6	1	

TABLE A-186. The degrees of characters in $\text{Irr}(3^7.3^3.(L_3(3) \times 2).2)$

Degree	1	2	3	4	6	8	12	16	24	32	48	72
Number	4	16	4	29	6	21	5	12	16	17	52	12
Degree	96	144	162	216	288	324	432	486	648	864	972	
Number	67	48	18	24	21	54	34	6	36	8	12	

TABLE A-187. The degrees of characters in $\text{Irr}(3^2.3^2.3^4.3^4.(2S_4 \times 2))$

Degree	1	2	3	4	6	8	12	16	24	32	
Number	8	32	8	42	12	30	6	28	33	18	
Degree	48	64	72	96	144	162	192	216	288	324	
Number	72	4	24	66	48	36	19	48	30	72	
Degree	432	486	576	648	864	972	1296	1728	1944		
Number	44	12	6	45	14	12	9	2	3		

TABLE A-188. The degrees of characters in $\text{Irr}(3^2.3^2.3^4.3^4.(2S_4 \times 2).2)$

Degree	1	2	4	6	8	12	18	24	36	54	72	108	162	216	324
Number	8	28	46	20	17	58	28	72	88	60	37	126	36	48	72

TABLE A-189. The degrees of characters in $\text{Irr}(3^7.3^4.3^2.2^3)$

Degree	1	2	4	6	8	12	16	18	24	36	
Number	16	56	60	40	26	84	4	56	72	96	
Degree	48	54	72	108	144	162	216	324	432	648	
Number	20	120	54	156	10	72	72	72	12	18	

TABLE A-190. The degrees of characters in $\text{Irr}(3^7.3^4.3^2.2^3.2)$

Degree	1	2	4	6	8	12	18	24	36
Number	8	24	18	20	4	26	16	8	30
Degree	54	72	108	162	216	324	486	648	972
Number	52	20	88	48	22	66	24	12	18

TABLE A-191. The degrees of characters in $\text{Irr}((3 \times 3_+^{1+8}).3^3.3.2^3)$

Degree	1	2	4	6	8	12	16	18	24	36	48	54
Number	16	32	24	40	8	44	1	32	14	60	1	104
Degree	72	108	144	162	216	324	432	486	648	972	1296	1944
Number	28	120	3	96	42	100	4	48	28	28	1	2

TABLE A-192. The degrees of characters in $\text{Irr}((3 \times 3_+^{1+8}).3^3.3.2^3.2)$

Degree	1	2	3	4	6	8	16	24	32	48	54	96	108
Number	4	14	4	14	8	8	10	16	4	18	20	8	42
Degree	144	162	216	288	324	432	486	648	864	972	1296	2592	
Number	8	14	34	4	16	44	2	27	22	1	30	9	

TABLE A-193. The degrees of characters in $\text{Irr}(3^5.3^4.3^4.2S_4.2)$

Degree	1	2	3	4	6	8	12	16	24	32
Number	8	20	8	18	8	15	2	13	32	6
Degree	48	54	64	96	108	144	162	192	216	288
Number	36	40	1	12	68	16	28	1	56	8
Degree	324	432	486	648	864	972	1296	1728	2592	5184
Number	28	68	4	55	34	2	52	4	16	1

TABLE A-194. The degrees of characters in $\text{Irr}(3^5.3^4.3^4.2S_4.2.2)$

Degree	1	78	91	105	168	182	195	260
Number	1	1	1	1	1	1	1	2
Degree	273	546	728	756	819	910	1092	1365
Number	1	1	1	1	1	2	1	2
Degree	1560	1638	1820	2106	2184	2457	2730	2835
Number	2	1	1	1	1	1	2	1
Degree	3640	4095	4212	4368	4536	5265	5460	5824
Number	2	2	1	2	1	1	3	2
Degree	6552	7020	7280	7371	8190	10530	10920	11648
Number	1	2	5	1	2	1	2	1
Degree	14560	14742	16380	16640	17472	17920	19656	19683
Number	1	2	1	2	3	2	2	1
Degree	21840	22113	29120	29484	32760	39312	43680	46592
Number	4	1	2	1	2	1	1	1
Degree	49140	52416	58240	58968	65520	68040	73710	84240
Number	2	1	3	2	9	1	3	1
Degree	88452	147420	174720	176904	189540	196560	221130	232960
Number	1	2	1	2	2	9	1	6
Degree	235872	252720	262080	265356	269568	294840	314496	349440
Number	2	2	11	1	2	3	4	2
Degree	353808	419328	442260	471744	483840	511758	524160	530712
Number	1	2	6	1	4	1	1	1
Degree	551124	589680	663390	698880	786240			
Number	1	4	1	1	1			

TABLE A-195. The degrees of characters in $\text{Irr}(3^7.O_7(3))$

Degree	1	78	91	105	168	182	195
Number	2	2	2	2	2	2	2
Degree	273	520	546	728	756	819	1092
Number	2	1	2	2	2	2	2
Degree	1365	1638	1820	2106	2184	2457	2730
Number	4	2	3	2	2	2	4
Degree	2835	3120	3640	4095	4212	4368	4536
Number	2	1	4	4	2	4	2
Degree	5265	5460	5824	6552	7280	7371	10530
Number	2	6	4	2	6	2	2
Degree	10920	11648	14040	14560	14742	16380	16640
Number	4	2	1	3	4	3	4
Degree	17472	17920	19656	19683	21840	22113	29120
Number	6	4	4	2	8	2	4
Degree	29484	32760	39312	43680	46592	49140	52416
Number	2	4	2	2	2	4	2
Degree	58240	58968	65520	68040	73710	84240	88452
Number	2	4	6	2	6	2	2
Degree	116480	131040	147420	174720	176904	196560	221130
Number	1	3	4	2	4	6	2
Degree	232960	235872	262080	265356	269568	294840	314496
Number	4	4	10	2	4	6	4
Degree	349440	353808	379080	393120	442260	465920	471744
Number	4	2	1	3	8	2	2
Degree	505440	511758	524160	530712	551124	589680	628992
Number	1	2	5	2	2	8	1
Degree	663390	698880	786240	838656	884520	967680	
Number	2	2	2	1	1	2	

TABLE A-196. The degrees of characters in $\text{Irr}(3^7.O_7(3).2)$

Degree	1	2	6	10	12	15	20	24	30	40
Number	2	1	2	3	1	4	5	2	4	1
Degree	48	60	64	72	80	81	90	120	128	144
Number	1	6	2	2	9	2	9	1	1	1
Degree	160	162	180	240	270	360	480	486	540	640
Number	3	1	12	4	2	10	6	3	13	9
Degree	648	720	810	960	1080	1152	1296	1440	1620	1920
Number	2	18	6	8	2	3	3	9	3	12
Degree	2160	2430	2880	2916	3240	3888	4860	5184	5760	6480
Number	4	8	22	3	4	4	6	2	23	8
Degree	7290	8640	9720	11664	12960	14580	17280	19440	21870	25920
Number	6	2	7	3	9	9	4	10	6	2
Degree	29160	31104	38880	39366						
Number	3	3	1	3						

TABLE A-197. The degrees of characters in $\text{Irr}(3^{1+10}.3:U_4(2):2)$

Degree	1	2	6	10	12	15	20	24	30
Number	4	2	4	6	2	8	10	4	8
Degree	40	48	60	64	72	80	81	90	120
Number	2	2	12	4	4	10	4	10	2
Degree	128	144	160	162	180	240	270	320	360
Number	2	2	4	2	10	8	4	1	16
Degree	480	486	540	640	648	720	810	960	1080
Number	8	6	6	6	4	22	4	17	9
Degree	1152	1280	1296	1440	1620	1920	2160	2304	2430
Number	2	3	6	18	4	12	4	1	16
Degree	2880	2916	3240	3840	4320	4860	5184	5760	6480
Number	21	6	9	3	1	12	4	32	16
Degree	7290	7776	8640	9720	11520	11664	12960	14580	17280
Number	12	2	4	14	5	6	14	18	4
Degree	19440	21870	25920	29160	31104	34560	38880	39366	
Number	20	12	5	6	6	1	2	6	

TABLE A-198. The degrees of characters in $\text{Irr}(3^{1+10}.3:U_4(2):2.2)$

Degree	1	2	3	4	6	8	12	16	18	24
Number	2	6	2	4	10	8	9	16	30	6
Degree	27	36	48	54	72	81	108	144	162	216
Number	4	27	24	21	66	4	8	144	2	16
Degree	432	486	648	972	1296	1458	1944	2916	3888	4374
Number	32	9	36	9	45	21	18	18	13	6

TABLE A-199. The degrees of characters in $\text{Irr}(3^7.3^5.3^{1+2}.2S_4)$

Degree	1	2	3	4	6	8	12	16	18	24	32	36
Number	4	12	4	8	20	8	18	18	8	12	4	15
Degree	48	54	72	96	108	144	162	216	288	324	432	486
Number	32	4	49	4	10	116	2	28	49	1	26	18
Degree	648	864	972	1296	1458	1944	2592	2916	3888	4374		
Number	48	10	18	40	42	36	14	36	26	12		

TABLE A-200. The degrees of characters in $\text{Irr}(3^7.3^5.3^{1+2}.2S_4.2)$

Degree	1	12	13	16	26	27	39	52	78	156
Number	1	1	1	4	9	3	1	6	11	9
Degree	208	234	324	351	432	468	624	702	729	1053
Number	15	27	2	2	8	24	11	26	2	2
Degree	1404	1872	2106	4212	5616	6318	12636	16848	18954	
Number	12	27	16	12	30	13	9	16	3	

TABLE A-201. The degrees of characters in $\text{Irr}(3^7.3^{3+3}.L_3(3))$

Degree	1	12	13	16	26	27	39	52	54
Number	2	2	2	8	14	2	2	9	1
Degree	78	104	156	208	234	416	468	624	648
Number	22	1	18	14	6	4	12	18	1
Degree	702	864	936	1248	1404	1458	1872	2106	2808
Number	13	4	12	1	22	1	18	29	3
Degree	3744	4212	5616	6318	11232	12636	16848	18954	33696
Number	9	25	24	26	9	18	24	6	2

TABLE A-202. The degrees of characters in $\text{Irr}(3^7.3^{3+3}.L_3(3).2)$

Degree	1	2	3	4	6	8	16	18	24	27
Number	2	6	2	4	1	8	16	9	24	4
Degree	36	48	54	72	81	108	144	162	216	324
Number	9	24	42	48	4	35	39	23	16	12
Degree	432	486	648	972	1296	1458	1944	3888		
Number	68	19	18	15	54	5	36	27		

TABLE A-203. The degrees of characters in $\text{Irr}(3^7.3^{1+6}.3.2S_4)$

Degree	1	2	3	4	6	8	16	18	24	32	36
Number	4	8	4	5	2	17	16	6	40	4	9
Degree	48	54	72	98	108	144	162	216	288	324	432
Number	26	34	3	6	43	54	36	10	12	27	56
Degree	486	648	864	972	1296	1458	1944	2592	2916	3888	7776
Number	26	36	22	21	60	6	75	12	1	42	3

TABLE A-204. The degrees of characters in $\text{Irr}(3^7.3^{1+6}.3.2S_4.2)$

Degree	1	2	3	4	6	8	9	12	16	24
Number	2	6	4	4	4	2	2	1	4	6
Degree	32	48	54	64	72	96	108	144	162	192
Number	6	14	9	12	9	10	11	17	6	12
Degree	216	288	324	432	486	576	648	864	972	1296
Number	24	20	11	28	5	13	18	8	8	15
Degree	1458	1728	1944	2592	3888	5184	5832	7776	15552	
Number	4	31	11	18	18	25	1	12	3	

TABLE A-205. The degrees of characters in $\text{Irr}(3^7.3^{1+6}.(2A_4 \times A_4).2)$

Degree	1	2	3	4	6	8	9	12	16
Number	4	8	8	5	8	5	4	2	4
Degree	24	32	48	54	64	72	96	108	128
Number	12	13	24	6	12	6	13	13	3
Degree	144	162	192	216	288	324	384	432	486
Number	17	8	6	23	21	23	5	27	6
Degree	576	648	864	972	1152	1296	1458	1728	1944
Number	20	28	17	13	3	20	4	24	23
Degree	2592	2916	3456	3888	5184	5832	7776	10368	15552
Number	39	1	10	36	26	2	24	6	6

TABLE A-206. The degrees of characters in $\text{Irr}(3^7.3^{1+6}.(2A_4 \times A_4).2.2)$

Degree	1	2	3	4	6	8	12	16	18	24
Number	4	10	4	4	10	6	15	12	6	16
Degree	36	48	54	72	108	144	162	216	324	432
Number	25	24	18	68	13	37	12	46	30	34
Degree	486	648	972	1296	1458	1944	2916	3888	5832	
Number	20	26	23	37	6	32	12	9	6	

TABLE A-207. The degrees of characters in $\text{Irr}(3^7.3^5.3^3.(S_4 \times 2))$

Degree	1	2	3	4	6	8	12	16	18	24	32	36
Number	8	12	8	6	20	13	26	12	12	25	3	26
Degree	48	54	72	96	108	144	162	216	288	324	432	486
Number	18	12	62	8	20	62	24	39	8	44	38	32
Degree	648	864	972	1296	1458	1944	2592	2916	3888	5832		
Number	48	11	48	36	12	64	10	24	18	12		

TABLE A-208. The degrees of characters in $\text{Irr}(3^7.3^5.3^3.(S_4 \times 2).2)$

Degree	1	2	4	6	12	18	27	36
Number	4	16	16	32	37	138	8	156
Degree	54	108	162	324	486	972	1458	2916
Number	86	71	58	92	84	40	36	3

TABLE A-209. The degrees of characters in $\text{Irr}(3^2.3^4.3^8.3^2.2^2)$

Degree	1	2	4	6	8	12	18	24	36	54	72
Number	8	24	18	56	4	40	52	9	160	64	52
Degree	108	162	216	324	486	648	972	1458	1944	2916	
Number	78	84	23	84	144	27	74	72	3	6	

TABLE A-210. The degrees of characters in $\text{Irr}(3^2.3^4.3^8.3^2.2^2.2)$

Degree	1	10	22	44	55	110	120	132	165
Number	2	2	1	2	2	3	2	1	2
Degree	176	220	320	440	486	528	660	880	891
Number	2	2	2	4	1	1	3	1	2
Degree	990	1024	1320	1408	1760	1782	1980	2430	2640
Number	2	2	2	1	1	1	1	1	4
Degree	2816	3960	4860	5346	7920	8448	10560	11264	11880
Number	2	4	1	2	3	4	2	2	6
Degree	12672	14080	21120	21384	23760	25344	26730	28160	31680
Number	2	2	4	1	3	1	3	3	4
Degree	32076	35640	42240	53460	56320	58320	63360	71280	80190
Number	2	4	2	5	4	1	7	2	1
Degree	84480	85536	106920	112640	114048	126720	128304	155520	160380
Number	6	1	4	2	2	6	2	1	2
Degree	202752	213840	228096	240570	253440	320760	337920	342144	427680
Number	3	3	1	4	5	1	3	2	2
Degree	433026	481140	497664	506880	590490				
Number	3	2	1	2	2				

TABLE A-211. The degrees of characters in $\text{Irr}(3^{1+10}.U_5(2):2)$

Degree	1	10	22	44	55	110	120	132	165
Number	4	4	2	4	4	6	4	2	4
Degree	176	220	320	440	486	528	660	880	891
Number	4	4	4	8	2	2	6	2	4
Degree	990	1024	1320	1408	1760	1782	1980	2430	2640
Number	4	4	4	2	2	2	2	2	4
Degree	2816	4860	5280	5346	7920	10560	11264	11880	12672
Number	4	2	1	4	8	4	4	4	4
Degree	14080	16896	21120	21384	23760	25344	26730	28160	32076
Number	4	2	4	2	4	2	6	2	4
Degree	35640	42240	47520	53460	56320	58320	63360	71280	80190
Number	8	5	1	10	9	2	16	4	2
Degree	84480	85536	106920	112640	114048	126720	128304	155520	160380
Number	8	2	8	4	4	12	4	2	4
Degree	168960	202752	213840	228096	240570	253440	320760	337920	342144
Number	1	2	6	2	8	6	2	2	4
Degree	405504	427680	433026	481140	497664	506880	590490	675840	
Number	1	4	6	4	2	5	4	1	

TABLE A-212. The degrees of characters in $\text{Irr}(3^{1+10}.U_5(2):2.2)$

Degree	1	2	4	5	6	8	10	20	30	40
Number	4	2	4	4	6	2	4	12	8	8
Degree	60	80	90	120	162	180	240	270	324	360
Number	15	2	6	18	2	29	7	18	1	26
Degree	486	540	648	720	810	972	1080	1296	1620	1944
Number	2	21	2	6	12	3	20	1	23	2
Degree	2160	2430	2916	3240	4860	6480	7290	9720	14580	19440
Number	7	18	1	14	21	8	4	8	4	1

TABLE A-213. The degrees of characters in $\text{Irr}(3^{1+10}.3^4.(2 \times A_5):2)$

Degree	1	2	4	5	6	8	10	12	20	30	40	60
Number	8	4	8	8	4	4	8	2	20	16	17	26
Degree	80	90	120	162	180	240	270	324	360	480	486	540
Number	4	12	21	4	18	10	12	2	46	2	4	36
Degree	648	720	810	972	1080	1296	1440	1620	1944	2160	2430	2916
Number	4	12	24	2	35	2	1	34	5	12	28	2
Degree	3240	4320	4860	6480	7290	9720	12960	14580	19440			
Number	31	1	44	12	8	16	1	8	2			

TABLE A-214. The degrees of characters in $\text{Irr}(3^{1+10}.3^4.(2 \times A_5):2.2)$

Degree	1	2	3	4	5	6	8	10	12	15
Number	2	3	2	3	2	3	3	3	5	2
Degree	16	18	20	40	80	120	160	180	240	270
Number	1	1	1	2	12	6	8	6	6	9
Degree	320	360	480	540	648	720	810	960	1080	1296
Number	2	9	8	21	2	11	6	4	9	1
Degree	1440	1620	2160	2430	2592	2880	3240	3888	4320	4860
Number	10	5	12	5	2	3	7	3	8	6
Degree	5184	6480	7290	8640	9720	12960	19440	25920	38880	
Number	1	20	4	7	6	10	6	6	2	

TABLE A-215. The degrees of characters in $\text{Irr}(3^2.3^4.3^8.(2A_4 \times A_5):2)$

Degree	1	2	3	4	5	6	8	10	12	15
Number	4	6	4	6	4	2	6	6	7	4
Degree	16	18	20	24	40	80	120	160	180	240
Number	2	2	2	1	4	20	12	17	4	8
Degree	270	320	360	480	540	648	720	810	960	1080
Number	6	4	8	9	25	4	13	8	6	23
Degree	1296	1440	1620	1920	2160	2430	2592	2880	3240	3888
Number	2	15	11	1	12	6	4	4	14	2
Degree	4320	4860	5184	5760	6480	7290	7776	8640	9720	12960
Number	19	9	2	1	32	4	1	10	13	22
Degree	14580	17280	19440	25920	38880	51840				
Number	1	1	12	8	4	1				

TABLE A-216. The degrees of characters in $\text{Irr}(3^2.3^4.3^8.(2A_4 \times A_5):2.2)$

Degree	1	2	4	6	8	12	16	24	36	48	144
Number	8	10	24	8	14	16	10	42	4	12	2

TABLE A-217. The degrees of characters in $\text{Irr}((3^2:2 \times (3^2 \times 3^{1+2}).3.2^2).2)$

Degree	1	2	4	6	8	12	16	24	32	36	48	72	96	144
Number	8	14	34	8	24	34	18	52	1	4	20	1	3	4

TABLE A-218. The degrees of characters in $\text{Irr}((3^2:2 \times (3^2 \times 3^{1+2}).3.2^2).2.2)$

Degree	1	4	14	56	64	78	91	104	168	182
Number	4	2	4	2	8	4	4	4	4	2
Degree	256	312	364	416	546	672	728	729	819	832
Number	4	2	8	2	2	2	4	4	4	4
Degree	896	1092	1456	1792	2184	2912	2916	3276	3328	
Number	2	6	2	4	4	4	2	2	2	

TABLE A-219. The degrees of characters in $\text{Irr}((3^2:2 \times G_2(3)).2)$

Degree	1	2	4	14	28	56	64	78	91	104	128
Number	4	1	4	4	1	4	8	4	4	4	2
Degree	156	168	182	208	256	312	336	364	416	546	672
Number	1	4	5	1	8	4	1	12	4	4	4
Degree	728	729	819	832	896	1092	1456	1458	1638	1664	1792
Number	5	4	4	4	4	8	5	1	1	1	4
Degree	2184	2912	2916	3276	3328	3584	4368	5824			
Number	5	4	4	4	4	1	1	1			

TABLE A-220. The degrees of characters in $\text{Irr}(3^2:2 \times G_2(3)).2.2)$

Degree	1	2	3	4	6	8	16	18	24	32	36
Number	4	8	4	5	2	9	10	6	16	6	9
Degree	48	54	72	96	108	144	162	216	288	324	432
Number	28	14	11	7	24	36	16	16	16	20	16
Degree	486	648	864	972	1296	1458	1944	2592	2916	3888	7776
Number	10	15	32	13	30	2	30	21	2	26	10

TABLE A-221. The degrees of characters in $\text{Irr}(3^2.3^4.3^8.3.(2 \times 2S_4))$

Degree	1	2	3	4	6	8	16	18	24	32
Number	8	16	8	10	4	18	20	4	32	8
Degree	36	48	54	64	72	96	108	144	162	192
Number	8	40	20	1	5	14	38	37	32	1
Degree	216	288	324	432	486	576	648	864	972	1296
Number	23	26	36	27	20	4	31	34	22	60
Degree	1458	1728	1944	2592	2916	3888	5184	7776	15552	
Number	4	8	57	26	4	53	4	16	1	

TABLE A-222. The degrees of characters in $\text{Irr}(3^2.3^4.3^8.3.(2 \times 2S_4).2)$

Degree	1	12	13	16	26	27	39	52	54	78
Number	2	2	2	8	10	2	2	6	1	10
Degree	104	156	208	234	312	416	468	624	648	702
Number	2	9	6	6	3	6	16	10	1	5
Degree	864	936	1248	1404	1458	1872	2106	2808	3744	4212
Number	4	11	3	12	1	6	13	6	12	17
Degree	6318	8424	11232	12636	16848	18954	25272	33696	37908	
Number	10	3	15	10	12	2	3	5	1	

TABLE A-223. The degrees of characters in $\text{Irr}(3^3.3^4.3^3.3^3.(L_3(3) \times 2))$

Degree	1	12	13	16	26	27	39	52	54	78	104
Number	4	4	4	16	20	4	4	12	2	20	4
Degree	156	208	234	312	416	468	624	648	702	832	864
Number	18	12	4	6	8	10	12	2	2	1	8
Degree	936	1248	1404	1458	1872	2106	2808	3744	4212	5616	6318
Number	12	8	18	2	16	26	10	12	34	1	20
Degree	7488	8424	11232	12636	16848	18954	22464	25272	33696	37908	67392
Number	3	6	14	20	24	4	4	6	6	2	1

TABLE A-224. The degrees of characters in $\text{Irr}(3^3.3^4.3^3.3^3.(L_3(3) \times 2).2)$

Degree	1	2	3	4	6	8	12	16	18	24	32	36	48
Number	4	8	4	5	8	9	9	10	8	7	6	19	22
Degree	54	72	96	108	144	162	216	288	324	432	486	648	864
Number	8	32	7	9	52	2	4	66	1	8	6	24	16
Degree	972	1296	1458	1944	2592	2916	3888	4374	5832	7776	8748		
Number	9	26	14	15	19	19	16	4	6	4	2		

TABLE A-225. The degrees of characters in $\text{Irr}(3^{1+10}.(3 \times 3^{1+2}).(2 \times 2S_4))$

Degree	1	2	3	4	6	8	12	16	18	24	32
Number	8	16	8	10	16	18	18	20	8	14	8
Degree	36	48	54	64	72	96	108	144	162	192	216
Number	16	28	8	1	38	14	12	72	4	1	6
Degree	288	324	432	486	576	648	864	972	1296	1458	1728
Number	66	2	17	12	19	48	16	18	44	28	4
Degree	1944	2592	2916	3888	4374	5184	5832	7776	8748		
Number	30	16	38	32	8	6	12	8	4		

TABLE A-226. The degrees of characters in $\text{Irr}(3^{1+10}.(3 \times 3^{1+2}).(2 \times 2S_4).2)$

Degree	1	2	4	6	8	12	18	24	36	54	72
Number	8	16	12	24	6	40	44	11	90	16	70
Degree	108	162	216	324	486	648	972	1458	1944	2916	5832
Number	54	36	32	48	48	39	54	24	14	14	1

TABLE A-227. The degrees of characters in $\text{Irr}(3^2.3^4.3^8.3^2.2^3)$

Degree	1	2	4	6	8	12	16	18	24	36	48	54	72	108
Number	16	32	24	48	8	56	1	40	20	104	2	32	82	68
Degree	144	162	216	324	432	486	648	972	1296	1458	1944	2916	3888	5832
Number	20	72	42	88	8	96	40	100	10	48	26	28	1	2

TABLE A-228. The degrees of characters in $\text{Irr}(3^2 \cdot 3^4 \cdot 3^8 \cdot 3^2 \cdot 2^3 \cdot 2)$

Degree	1	4	8	27	28	32	42	48	56	70	84	105	108	112	120
Number	4	1	4	4	4	1	6	4	4	2	6	4	1	1	4
Degree	140	162	168	189	192	216	224	336	420	480	648	672	756	864	
Number	2	4	5	4	1	4	1	1	1	1	1	1	1	1	

TABLE A-229. The degrees of characters in $\text{Irr}((5:2 \times A_9).2)$

Degree	1	4	8	27	28	32	42	48	56	70	84	105	108	112	120
Number	8	2	8	8	8	2	12	8	8	4	8	8	2	2	8
Degree	162	168	189	192	216	224	280	336	420	480	648	672	756	864	
Number	8	11	8	2	8	2	1	2	2	2	2	2	2	2	

TABLE A-230. The degrees of characters in $\text{Irr}((5:4 \times A_9).2)$

Degree	1	2	3	4	8	12	16	48
Number	16	8	16	8	4	8	3	1

TABLE A-231. The degrees of characters in $\text{Irr}((5^2 \times A_4).4^2)$

Degree	1	2	3	4	8	12	16	32	48
Number	32	16	32	16	8	16	2	1	2

TABLE A-232. The degrees of characters in $\text{Irr}((5^2 \times A_4).4^2.2)$

Degree	1	2	3	4	6	9	12	24	48	72
Number	4	12	8	8	8	4	2	4	2	4

TABLE A-233. The degrees of characters in $\text{Irr}((5^2:4A_4 \times A_4).2)$

Degree	1	2	3	4	6	8	9	12	24	48	72
Number	8	16	16	10	16	2	8	4	8	4	8

TABLE A-234. The degrees of characters in $\text{Irr}((5^2:4A_4 \times A_4).2)$

Degree	1	6	10	14	15	21	35	36	60	84	90	126	210
Number	6	7	12	12	6	6	6	1	2	2	1	1	1

TABLE A-235. The degrees of characters in $\text{Irr}(7:6 \times A_7)$

Degree	1	6	14	15	20	21	35	36	84	90	120	126	210
Number	12	14	24	12	6	12	12	2	4	2	1	2	2

TABLE A-236. The degrees of characters in $\text{Irr}((7:6 \times A_7).2)$

Degree	1	3	6	18
Number	18	12	3	2

TABLE A-237. The degrees of characters in $\text{Irr}(7^2(6 \times 3))$

Degree	1	6	36
Number	36	12	1

TABLE A-238. The degrees of characters in $\text{Irr}(7^2(6 \times 6))$

Degree	1	6	7	8	48	96
Number	2	7	2	5	2	3

TABLE A-239. The degrees of characters in $\text{Irr}(7^2:2L_2(7).2)$

Degree	1	6	12	42
Number	12	4	3	2

TABLE A-240. The degrees of characters in $\text{Irr}(7^{1+2}:(6 \times 2))$

Degree	1	6	7	8	48	96
Number	2	7	2	5	2	3

TABLE A-241. The degrees of characters in $\text{Irr}(7^2:2L_2(7).2)$

Degree	1	6	12	42
Number	12	4	3	2

TABLE A-242. The degrees of characters in $\text{Irr}(7^{1+2}:(6 \times 2))$

Degree	1	2	12	18	42
Number	12	6	3	4	6

TABLE A-243. The degrees of characters in $\text{Irr}(7^{1+2}:(S_3 \times 6))$

Degree	1	2	12	36	42	84
Number	12	15	6	2	4	2

TABLE A-244. The degrees of characters in $\text{Irr}(7^{1+2}:(S_3 \times 6).2)$

E-mail address: `an@math.auckland.ac.nz`

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF AUCKLAND, AUCKLAND, NEW ZEALAND

E-mail address: `john@maths.usyd.edu.au`

SCHOOL OF MATHEMATICS AND STATISTICS, UNIVERSITY OF SYDNEY, NSW 2006, AUSTRALIA

E-mail address: `obrien@math.auckland.ac.nz`

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF AUCKLAND, AUCKLAND, NEW ZEALAND

E-mail address: `billu@maths.usyd.edu.au`

SCHOOL OF MATHEMATICS AND STATISTICS, UNIVERSITY OF SYDNEY, NSW 2006, AUSTRALIA