Appendix A The groups and the isomorphism classes

The groups are listed in Appendix A.1, and the isomorphism classes in Appendix A.2.

Appendix A.1 The groups

Degree 2:

Nr	Name	|G|	p	N	C	S	Generators
1	S_2	2=2!	−	1	1		$(0,1)$

Degree 3:

Nr	Name	|G|	p	N	C	S	Generators
1	A_3	$3=\frac{3!}{2}$	+	2	1		$(0,1,2)$
2	S_3	6=3!	−	2	2	$2/1$	$(0,1)$, $(0,2)$

Degree 4:

Generator: $a = (0,1,2,3)$
Block: $2 = [0,2]$

Nr	Name	|G|	p	N	C	S	Generators	Blocks
1	$C(4)$ $= 4$	$4=2^2$	−	3	1		a	2
2	$E(4)$ $= 2[\times]2$	$4=2^2$	+	5	2		$(0,1)(2,3)$, $(0,3)(1,2)$	[0,3],2,[0,1]
3	$D(4)$	$8=2^3$	−	3	3	$2/1$	a, $(1,3)$	2
4	A_4	$12=\frac{4!}{2}$	+	5	5	$3/1$	$(0,1,2)$, $(0,2,3)$	
5	S_4	24=4!	−	5	5	$3/2$	$(0,1)$, $(0,2)$, $(0,3)$	

Degree 5:

Generator: $a = (0,1,2,3,4)$

Nr	Name	|G|	p	N	C	S	Generators
1	$C(5)$ $= 5$	5=5	+	3	1		a
2	$D(5)$ $= 5{:}2$	$10=2\cdot 5$	+	3	2	$2/1^2$	a, $(1,4)(2,3)$
3	$F(5)$ $= 5{:}4$	$20=2^2 5$	−	3	5	$4/1$	a, $(1,2,4,3)$
4	A_5	$60=\frac{5!}{2}$	+	5	5	$4/4$	$(0,1,2)$, $(0,2,3)$, $(0,3,4)$
5	S_5	120=5!	−	5	5	$4/5$	$(0,1)$, $(0,2)$, $(0,3)$, $(0,4)$

Degree 6:

Generators:

$a = (0,2,4)(1,3,5)$
$b = (1,5)(2,4)$
$c = (0,2,4)$
$d = (0,3)(1,4)(2,5)$
$e = (1,4)(2,5)$
$f = (0,3)$
$g = (0,5)(1,4)(2,3)$
$h = (0,1,2,3,4)$
$i = (0,1,2,3,4,5)$

Blocks:

$2 = [0,3]$
$3 = [0,2,4]$

Nr	Name	|G|	p	N	C	S	Generators	Blocks
1	$C(6)$ $= 6$ $= 3[\times]2$	6=2·3	–	3	1		i	3,2
2	$D_6(6) = [3]2$	6=2·3	–	9	2		a,g	[0,5],3,2,[0,1]
3	$D(6)$ $= S(3)[\times]2$	12=$2^2$3	–	3	3	$2/1^2$	i,g	3,2
4	$A_4(6)$ $= [2^2]3$	12=$2^2$3	+	11	6	$2/1^2$	e,a	2
5	$F_{18}(6)$ $= [3^2]2 = 3 \wr 2$	18=2·3^2	–	9	5	$3/1$	c,d	3
6	$2A_4(6)$ $= [2^3]3$ $= 2 \wr 3$	24=$2^3$3	–	11	6	$2/1^2$	f,a	2
7	$S_4(6d)$ $= [2^2]S(3)$	24=$2^3$3	+	11	11	$4/2$	e,a,b	2
8	$S_4(6c)$ $= \frac{1}{2}[2^3]S(3)$	24=$2^3$3	–	11	11	$4/1$	e,a,fb	2
9	$F_{18}(6){:}2$ $= [\frac{1}{2}S(3)^2]2$	36=$2^2 3^2$	–	13	13	$2/1\,3/2$	c,b,d	3
10	$F_{36}(6)$ $= \frac{1}{2}[S(3)^2]2$	36=$2^2 3^2$	+	13	13	$2/1\,3/2$	$c,b,(0,3)(1,4,5,2)$	3
11	$2S_4(6)$ $= [2^3]S(3)$ $= 2 \wr S(3)$	48=$2^4$3	–	11	11	$4/3$	f,a,b	2
12	$L(6)$ $= PSL(2,5)$ $= A_5(6)$	60=$2^2$3·5	+	14	16	$5/2$	$h,(0,5)(1,4)$	
13	$F_{36}(6){:}2$ $= [S(3)^2]2$ $= S(3) \wr 2$	72=$2^3 3^2$	–	13	13	$2/1\,3/2$	$c,(2,4),d$	3

Nr	Name	|G|	p	N	C	S	Generators	Blocks
14	$L(6){:}2$ $= PGL(2,5)$ $= S_5(6)$	120=$2^3$3·5	–	14	16	$5/3$	$h,c^{-1}i$	
15	A_6	360=$\frac{6!}{2}$	+	16	16	$5/4$	$(0,1,2),(0,2,3),(0,3,4),$ $(0,4,5)$	
16	S_6	720=6!	–	16	16	$5/5$	$(0,1),(0,2),f,(0,4),h^{-1}i$	

Degree 7:

Generator: $a = (0,1,2,3,4,5,6)$

Nr	Name	|G|	p	N	C	S	Generators
1	$C(7) = 7$	7=7	+	4	1		a
2	$D(7) = 7{:}2$	14=2·7	−	4	2	$2/1^3$	a, $(1,6)(2,5)(3,4)$
3	$F_{21}(7) = 7{:}3$	21=3·7	+	4	3	$3/1^2$	a, $(1,2,4)(3,6,5)$
4	$F_{42}(7) = 7{:}6$	42=2·3·7	−	4	7	$6/1$	a, $(1,3,2,6,4,5)$
5	$L(7)$ $= L(3,2)$	$168=2^3 3\cdot 7$	+	5	7	$6/7$	a, $(1,2)(3,6)$
6	A_7	$2520=\frac{7!}{2}$	+	7	7	$6/15$	$(0,1,2)$, $(0,2,3)$, $(0,3,4)$, $(0,4,5)$, $(0,5,6)$
7	S_7	5040=7!	−	7	7	$6/16$	$(0,1)$, $(0,2)$, $(0,3)$, $(0,4)$, $(0,5)$, $(0,6)$

Degree 8:

Generators:

a	=	$(0,4)(1,5)(2,6)(3,7)$	n	=	$(1,3)(4,5,6,7)$			
b	=	$(0,1)(2,3)(4,5)(6,7)$	o	=	$(1,3)(5,7)$			
c	=	$(0,2)(1,3)(4,6)(5,7)$	p	=	$(1,2,6,3,4,5,7)$			
d	=	$(0,1,2,3)(4,5,6,7)$	q	=	$(1,2,3)$			
e	=	$(0,1,2,3,4,5,6,7)$	r	=	$(0,7)(1,6)(2,3)(4,5)$			
f	=	$(1,2,3)(4,6,5)$	s	=	$(0,4)(1,5)$			
g	=	$(0,4)$	t	=	$(0,2,4,6)(1,3,5,7)$			
h	=	$(1,5)(3,7)$	u	=	$(0,1,3)(4,5,7)$			
i	=	$(1,2,3)(5,6,7)$	v	=	$(0,1,2,3)$			
j	=	$(2,6)(3,7)$	w	=	$(0,1,2,3,4,5,6)$			
k	=	$(0,1)(4,5)$	x	=	$(2,3)(4,5)$			
l	=	$(0,7)(1,6)(2,5)(3,4)$	y	=	$(4,6)(5,7)$			
m	=	$(0,2)(1,3)$	z	=	$(4,5)(6,7)$			

Blocks:

2	=	$[0,4]$
2a	=	$[0,2]$
2b	=	$[0,7]$
2c	=	$[0,1]$
2d	=	$[0,6]$
2e	=	$[0,3]$
2f	=	$[0,5]$
4	=	$[0,1,2,3]$
4a	=	$[0,2,4,6]$
4b	=	$[0,1,4,5]$
4c	=	$[0,2,5,7]$
4d	=	$[0,3,4,7]$
4e	=	$[0,1,6,7]$

Nr	Name	$\lvert G\rvert$	p	N	C	S	Generators	Blocks
1	$C(8)$ $= 8$	$8=2^3$	$-$	15	1		e	4a,2
2	$4[\times]2$	$8=2^3$	$+$	29	2		d,a	4,2a,4c,4a,2,2d
3	$E(8)$ $= 2[\times]2[\times]2$	$8=2^3$	$+$	48	3		b,c,a	2e,4,[0,3,5,6],4d, 2a,4c,4a,2f,4b,2, 2b,4e,2d,2c
4	$D_8(8)$ $= [4]2$	$8=2^3$	$+$	26	4		d,l	4,2a,4c,4a, 2b,2,2f,2d
5	$Q_8(8)$	$8=2^3$	$+$	40	5		d, $(0,4,2,6)(1,7,3,5)$	4,2a,4c,4a
6	$D(8)$	$16=2^4$	$-$	15	6	$2/1^3$	e,l	4a,2
7	$\frac{1}{2}[2^3]4$	$16=2^4$	$-$	26	7	$2/1^2$	e,h	4a,2
8	$2D_8(8)$ $= [D(4)]2$	$16=2^4$	$-$	15	8	$2/1^3$	e, $(1,3)(2,6)(5,7)$	4a,2
9	$E(8){:}2$ $= D(4)[\times]2$	$16=2^4$	$+$	29	9	$2/1^2$	b,c,a,z	2e,4,2a,4b,4e,2c
10	$[2^2]4$	$16=2^4$	$+$	29	10	$2/1^2$	h,d	2a,4a,2,2d
11	$\frac{1}{2}[2^3]E(4)$ $= Q_8{:}2$	$16=2^4$	$+$	26	11	$2/1^2$	h,t,hb	4d,4a,4b,2
12	$2A_4(8)$ $= SL(2,3)$	$24=2^3 3$	$+$	23	12	$3/1^2$	t,u	2
13	$E(8){:}3$ $= A(4)[\times]2$	$24=2^3 3$	$+$	24	24	$3/1^2$	b,c,a,f	4,2b
14	$S(4)[\frac{1}{2}]2$ $= \frac{1}{2}(S_4[\times]2)$	$24=2^3 3$	$+$	24	24	$3/1^2$	c,i,ka	4,2
15	$[\frac{1}{4}cD(4)^2]2$	$32=2^5$	$-$	26	35	$2/1\,4/2$	e,h,l	4a,2
16	$\frac{1}{2}[2^4]4$	$32=2^5$	$-$	35	27	$2/1^3$	j,e	4a,2
17	$[4^2]2$	$32=2^5$	$-$	26	17	$4/1$	v,a	4,2a
18	$E(8){:}E_4$ $= [2^2]D(4)$	$32=2^5$	$+$	41	18	$4/2$	b,c,a,z,y	2e,4,2a,2c
19	$E(8){:}4$ $= [\frac{1}{4}eD(4)^2]2$	$32=2^5$	$+$	29	35	$2/1\,4/1$	b,c,a,n	4,2a
20	$[2^3]4$	$32=2^5$	$+$	35	27	$2/1^3$	j,d	4a,2
21	$\frac{1}{2}[2^4]E(4)$ $= [\frac{1}{4}dD(4)^2]2$	$32=2^5$	$-$	35	31	$2/1^3$	h,oe,c	4d,4a,4b,2
22	$E(8){:}D_4$ $= [2^3]2^2$	$32=2^5$	$+$	44	31	$2/1^3$	b,c,a,x,kb	4,4b,4e,2c
23	$2S_4(8)$ $= GL(2,3)$	$48=2^4 3$	$-$	23	44	$6/2$	e,u	2
24	$E(8){:}D_6$ $= S(4)[\times]2$	$48=2^4 3$	$+$	24	24	$3/2^2$	b,c,a,f,x	4,2b

Nr	Name	$\lvert G\rvert$	p	N	C	S	Generators	Blocks
25	$E(8){:}7$	$56{=}2^3 7$	+	36	50	$7/1$	b,c,a,p	
	$= F_{56}(8)$							
26	$\frac{1}{2}[2^4]eD(4)$	$64{=}2^6$	−	35	35	$2/1\ 4/3$	e,s, $(0,4)(1,7)(3,5)$	4a,2
27	$[2^4]4$	$64{=}2^6$	−	35	27	$2/1^3$	g,d	4a,2
28	$\frac{1}{2}[2^4]dD(4)$	$64{=}2^6$	−	35	35	$2/1\ 4/3$	j,o,e	4a,2
29	$E(8){:}D_8$	$64{=}2^6$	+	35	35	$2/1\ 4/3$	b,c,a,n,o	4,2a
	$= [2^3]D(4)$							
30	$\frac{1}{2}[2^4]cD(4)$	$64{=}2^6$	−	35	35	$2/1\ 4/3$	j,og,d	4a,2
31	$[2^4]E(4)$	$64{=}2^6$	−	44	31	$2/1^3$	g,b,c	4d,4a,4b,2
32	$[2^3]A(4)$	$96{=}2^5 3$	+	44	44	$6/4$	b,c,a,f, $(2,5)(3,4)$	2b
33	$E(8){:}A_4$	$96{=}2^5 3$	+	41	47	$3/1\ 4/4$	b,c,a,f,y	4
	$= [\frac{1}{3}A(4)^2]2$							
	$= E(4){:}6$							
34	$\frac{1}{2}[E(4)^2{:}S_3]2$	$96{=}2^5 3$	+	45	47	$3/1\ 4/4$	zb,i, $(0,4)(1,5)(2,7)(3,6)$	4
	$= E(4)^2{:}D_6$							
35	$[2^4]D(4)$	$128{=}2^7$	−	35	35	$2/1\ 4/3$	g,o,d	4a,2
36	$E(8){:}F_{21}$	$168{=}2^3 3{\cdot}7$	+	36	50	$7/3$	b,c,a,p,f	
37	$L(8)$	$168{=}2^3 3{\cdot}7$	+	43	50	$7/3$	w, $(1,2,4)(3,6,5)$, r	
	$= PSL(2,7)$							
38	$[2^4]A(4)$	$192{=}2^6 3$	−	44	44	$6/6$	g,b,i	2
39	$[2^3]S(4)$	$192{=}2^6 3$	+	44	44	$6/7$	b,c,a,f, $(1,6)(2,3,5,4)$	2b
40	$\frac{1}{2}[2^4]S(4)$	$192{=}2^6 3$	−	44	44	$6/8$	s,b,i,$e^{-1}u$	2
41	$E(8){:}S_4$	$192{=}2^6 3$	+	41	47	$3/2\ 4/5$	b,c,a,f,n	4
	$= [E(4)^2{:}S_3]2$							
	$= E(4)^2{:}D_{12}$							
42	$[A(4)^2]2$	$288{=}2^5 3^2$	+	45	47	$3/1\ 4/4$	m,q,a	4
43	$L(8){:}2$	$336{=}2^4 3{\cdot}7$	−	43	50	$7/4$	w, $(1,3,2,6,4,5)$, r	
	$= PGL(2,7)$							
44	$[2^4]S(4)$	$384{=}2^7 3$	−	44	44	$6/11$	g,k,d	2
45	$[\frac{1}{2}S(4)^2]2$	$576{=}2^6 3^2$	+	47	47	$3/2\ 4/5$	m,q,k,a	4
46	$\frac{1}{2}[S(4)^2]2$	$576{=}2^6 3^2$	−	47	47	$3/2\ 4/5$	m,q,k, $(0,4)(1,5)(2,7,3,6)$	4
47	$[S(4)^2]2$	$1152{=}2^7 3^2$	−	47	47	$3/2\ 4/5$	v, $(2,3)$, a	4
48	$E(8){:}L_7$	$1344{=}2^6 3{\cdot}7$	+	48	50	$7/5$	b,c,a,p,f,xf	
	$= AL(8)$							
49	A_8	$20160{=}\frac{8!}{2}$	+	50	50	$7/6$	m/q, $(0,4,5)$, $(0,5,6)$, $q^{-1}m$, $(0,3,4)$, $(0,6,7)$	
50	S_8	$40320{=}8!$	−	50	50	$7/7$	$q^{-1}v$, $(0,2)$, q/v,g, $(0,5)$, $(0,6)$, $e^{-1}w$	

Degree 9:

Generators:

$a = (0,3,6)(1,4,7)(2,5,8)$
$b = (0,1,2)(3,4,5)(6,7,8)$
$c = (0,1,2)$
$d = (3,4,5)(6,8,7)$
$e = (3,6)(4,7)(5,8)$
$f = (0,1,2,3,4,5,6,7,8)$
$g = (1,2)(3,6)(4,8)(5,7)$
$h = (1,2)(3,5)(6,7)$
$i = (1,2)(4,5)(7,8)$
$j = (1,8,2,4)(3,5,6,7)$
$k = (1,6,4,5,2,3,8,7)$
$l = (4,5)(7,8)$
$m = (0,1)(2,3)(4,5)(6,7)$
$n = (1,8)(2,7)(3,6)(4,5)$
$o = (1,4,7)(2,8,5)$
$p = (1,2,4,3,6,7,5)$
$q = (1,2)$
$r = (0,8)(2,5)(3,6)(4,7)$

Blocks:

$3 = [0,1,2]$
$3a = [0,3,6]$
$3b = [0,4,8]$
$3c = [0,5,7]$

Nr	Name	|G|	p	N	C	S	Generators	Blocks
1	$C(9)$ $= 9$	$9=3^2$	+	10	1		f	3a
2	$E(9)$ $= 3[\times]3$	$9=3^2$	+	26	2		b,a	3,3c,3a,3b
3	$D(9)$ $= 9{:}2$	$18=2{\cdot}3^2$	+	10	3	$2/1^4$	f,n	3a
4	$S(3)[\times]3$	$18=2{\cdot}3^2$	−	8	4	$2/1^3$	b,i,a	3,3a
5	$S(3)[\frac{1}{2}]S(3)$ $= 3^2{:}2$	$18=2{\cdot}3^2$	+	26	5	$2/1^4$	b,a,g	3,3c,3a,3b
6	$\frac{1}{3}[3^3]3$	$27=3^3$	+	21	17	$3/1^2$	o,f	3a
7	$E(9){:}3$ $= [3^2]3$	$27=3^3$	+	24	17	$3/1^2$	b,a,d	3
8	$S(3)[\times]S(3)$ $= E(9){:}D_4$	$36=2^2 3^2$	−	16	8	$2/1^2\ 4/2$	b,i,a,e	3,3a
9	$E(9){:}4$	$36=2^2 3^2$	+	19	16	$4/1^2$	b,a,j	
10	$[3^2]S(3)_6$	$54=2{\cdot}3^3$	+	10	31	$2/1\ 6/1$	o,f,n	3a
11	$E(9){:}6$ $= \frac{1}{2}[3^2{:}2]S(3)$	$54=2{\cdot}3^3$	+	18	31	$2/1\ 6/1$	b,a,d,g	3
12	$[3^2]S(3)$	$54=2{\cdot}3^3$	−	24	20	$6/2$	d,a,e	3

Nr	Name	$\lvert G\rvert$	p	N	C	S	Generators	Blocks
13	$E(9){:}D_6$ $= [3^2{:}2]3$ $= [\frac{1}{2}S(3)^2]3$	$54=2\cdot 3^3$	$-$	18	28	$2/1\,3/2^2$	b,a,d,h	3
14	$M(9)$ $= E(9){:}Q_8$	$72=2^3 3^2$	$+$	26	34	$8/5$	$b,a,j,k^{-1}h$	
15	$E(9){:}8$	$72=2^3 3^2$	$-$	19	34	$8/1$	b,a,k	
16	$E(9){:}D_8$	$72=2^3 3^2$	$-$	19	16	$4/3^2$	b,a,h,jh	
17	$[3^3]3$ $= 3 \wr 3$	$81=3^4$	$+$	24	17	$3/1^2$	c,a	3
18	$E(9){:}D_{12}$ $= [3^2{:}2]S(3)$ $= [\frac{1}{2}S(3)^2]S(3)$	$108=2^2 3^3$	$-$	18	31	$2/1\,6/3$	b,a,d,g,h	3
19	$E(9){:}2D_8$	$144=2^4 3^2$	$-$	19	34	$8/8$	b,a,k,h	
20	$[3^3]S(3)$ $= 3 \wr S(3)$	$162=2\cdot 3^4$	$-$	24	20	$6/5$	c,a,e	3
21	$\frac{1}{2}[3^3{:}2]S(3)$	$162=2\cdot 3^4$	$+$	24	31	$2/1\,6/5$	c,a,g	3
22	$[3^3{:}2]3$	$162=2\cdot 3^4$	$-$	24	28	$2/1\,3/2^2$	c,i,a	3
23	$E(9){:}2A_4$	$216=2^3 3^3$	$+$	26	34	$8/12$	b,a,j,d	
24	$[3^3{:}2]S(3)$	$324=2^2 3^4$	$-$	24	31	$2/1\,6/9$	c,i,a,e	3
25	$[\frac{1}{2}S(3)^3]3$	$324=2^2 3^4$	$+$	31	28	$2/1\,3/2^2$	c,l,a	3
26	$E(9){:}2S_4$	$432=2^4 3^3$	$-$	26	34	$8/23$	b,a,k,d	
27	$L(9)$ $= PSL(2,8)$	$504=2^3 3^2 7$	$+$	32	34	$8/25$	m,p,r	
28	$[S(3)^3]3$ $= S(3) \wr 3$	$648=2^3 3^4$	$-$	31	28	$2/1\,3/2^2$	c,q,a	3
29	$[\frac{1}{2}S(3)^3]S(3)$	$648=2^3 3^4$	$-$	31	31	$2/1\,6/13$	c,l,a,e	3
30	$\frac{1}{2}[S(3)^3]S(3)$	$648=2^3 3^4$	$+$	31	31	$2/1\,6/13$	c,l,a,qe	3
31	$[S(3)^3]S(3)$ $= S(3) \wr S(3)$	$1296=2^4 3^4$	$-$	31	31	$2/1\,6/13$	c,q,a,e	3
32	$L(9){:}3$ $= P\Gamma L(2,8)$	$1512=2^3 3^3 7$	$+$	32	34	$8/36$	m,p,r, $(2,4,6)(3,5,7)$	
33	A_9	$181440=\frac{9!}{2}$	$+$	34	34	$8/49$	c, $(0,2,3)$, $(0,3,4)$, $(0,4,5)$, $(0,5,6)$, $(0,6,7)$, $(0,7,8)$	
34	S_9	$362880=9!$	$-$	34	34	$8/50$	qc,cq, $(0,3)$, $(0,4)$, $(0,5)$, $(0,6)$, $(0,7)$, $(0,8)$	

Degree 10:

Generators:

$a = (0,2,4,6,8)(1,3,5,7,9)$
$b = (0,2,4,6,8)$
$c = (0,5)(1,6)(2,7)(3,8)(4,9)$
$d = (0,5)(2,7)$
$e = (1,7,9,3)(2,4,8,6)$
$f = (0,5)$
$g = (0,1,2)(3,4,5)(6,7,8)$
$h = (0,9)(1,2)(4,7)(5,8)$
$i = (0,2)(5,7)$
$j = (1,9)(2,8)(3,7)(4,6)$
$k = (1,3,2,6)(4,5,8,7)$
$l = (0,1,2,3,4,5,6,7,8,9)$
$m = (2,8)(4,6)$
$n = (0,2,4)(5,7,9)$
$o = (1,7,3,4,2,5,6,8)$
$p = (0,5)(1,6,9,4)(2,3,8,7)$
$q = (1,3,9,7)(2,4,8,6)$
$r = (0,2)$
$s = (3,6)(4,7)(5,8)$

Blocks:

$2 = [0,5]$
$5 = [0,2,4,6,8]$

Nr	Name	|G|	p	N	C	S	Generators	Blocks
1	$C(10)$ $= 5[\times]2$	10=2·5	−	5	1		l	5,2
2	$D(10)$ $= 5{:}2$	10=2·5	−	17	2		a,jc	[0,9],5,[0,7], 2,[0,3],[0,1]
3	$D_{10}(10)$ $= [D(5)]2$	20=$2^2$5	−	5	3	$2/1^4$	l,lj	5,2
4	$\frac{1}{2}[F(5)]2$	20=$2^2$5	−	5	4	$2/1^4$	a,ec	5,2
5	$F(5)[\times]2$	40=$2^3$5	−	5	22	$4/1^2$	l,e	5,2
6	$[5^2]2$	50=2·5^2	−	17	6	$5/1$	b,c	5
7	$A_5(10)$	60=$2^2$3·5	+	13	13	$3/2\,6/2$	a, $(0,5)(1,9)(3,4)(6,7)$	
8	$[2^4]5$	80=$2^4$5	+	29	14	$2/1^4$	d,a	2
9	$[\frac{1}{2}D(5)^2]2$	100=$2^2$$5^2$	−	27	21	$2/1^2\,5/2$	b,j,c	5
10	$\frac{1}{2}[D(5)^2]2$	100=$2^2$$5^2$	−	27	21	$2/1^2\,5/2$	b,p	5
11	$A(5)[\times]2$	120=$2^3$3·5	−	22	22	$4/4^2$	a,n,c	5,2
12	$\frac{1}{2}[S(5)]2$ $= S_5(10a)$	120=$2^3$3·5	−	22	22	$4/4^2$	a, $(0,5)(1,4)(2,7)(3,8)(6,9)$	5,2
13	$S_5(10d)$	120=$2^3$3·5	−	13	13	$3/2\,6/3$	a, $(1,2)(3,7)(8,9)$	
14	$[2^5]5$	160=$2^5$5	−	29	14	$2/1^4$	f,a	2
15	$[2^4]D(5)$	160=$2^5$5	+	29	23	$4/3^2$	d,a,j	2

Nr	Name	|G|	p	N	C	S	Generators	Blocks
16	$\frac{1}{2}[2^5]D(5)$	$160=2^5 5$	−	29	23	$4/3^2$	d,a,jf	2
17	$[5^2{:}4]2$	$200=2^3 5^2$	−	27	43	$4/1\,5/3$	b,e,c	5
18	$[5^2{:}4]2_2$	$200=2^3 5^2$	+	28	43	$4/1\,5/3$	b,e, $(0,5)(1,4,3,2,9,6,7,8)$	5
19	$[5^2{:}4_2]2$	$200=2^3 5^2$	−	33	43	$4/1\,5/3$	b,q,c	5
20	$[5^2{:}4_2]2_2$	$200=2^3 5^2$	−	33	43	$4/1\,5/3$	b,q,p	5
21	$[D(5)^2]2$	$200=2^3 5^2$	−	27	21	$2/1^2\,5/2$	b,m,c	5
22	$S(5)[\times]2$	$240=2^4 3{\cdot}5$	−	22	22	$4/5^2$	a,i,c	5,2
23	$[2^5]D(5)$	$320=2^6 5$	−	29	23	$4/3^2$	f,a,j	2
24	$[2^4]F(5)$	$320=2^6 5$	+	29	39	$8/20$	d,a,e	2
25	$\frac{1}{2}[2^5]F(5)$	$320=2^6 5$	−	29	39	$8/16$	d,a,fe	2
26	$L(10)$ $= PSL(2,9)$	$360=2^3 3^2 5$	+	35	45	$9/9$	g,k,h	
27	$[\frac{1}{2}F(5)^2]2$	$400=2^4 5^2$	−	33	43	$4/1\,5/3$	b,m,e,c	5
28	$\frac{1}{2}[F(5)^2]2$	$400=2^4 5^2$	+	33	43	$4/1\,5/3$	b,m, $(0,5)(1,6,7,2,9,4,3,8)$	5
29	$[2^5]F(5)$	$640=2^7 5$	−	29	39	$8/27$	f,a,e	2
30	$L(10){:}2$ $= PGL(2,9)$	$720=2^4 3^2 5$	−	35	45	$9/15$	g,o,h	
31	$M(10)$ $= L(10)'2$	$720=2^4 3^2 5$	+	35	45	$9/14$	g,k,h,os	
32	$S_6(10)$ $= L(10){:}2$	$720=2^4 3^2 5$	−	35	45	$9/16$	g,k,h,s	
33	$[F(5)^2]2$	$800=2^5 5^2$	−	33	43	$4/1\,5/3$	b, $(2,4,8,6)$, c	5
34	$[2^4]A(5)$	$960=2^6 3{\cdot}5$	+	39	39	$8/32$	d,a,n	2
35	$L(10).2^2$ $= P\Gamma L(2,9)$	$1440=2^5 3^2 5$	−	35	45	$9/19$	g,o,h,s	
36	$[2^5]A(5)$	$1920=2^7 3{\cdot}5$	−	39	39	$8/38$	f,a,n	2
37	$[2^4]S(5)$	$1920=2^7 3{\cdot}5$	+	39	39	$8/39$	d,a,i	2
38	$\frac{1}{2}[2^5]S(5)$	$1920=2^7 3{\cdot}5$	−	39	39	$8/40$	d,a, $(0,5)(2,4)(7,9)$	2
39	$[2^5]S(5)$	$3840=2^8 3{\cdot}5$	−	39	39	$8/44$	f,a,i	2
40	$[A(5)^2]2$	$7200=2^5 3^2 5^2$	−	41	43	$4/4\,5/4$	b, $(0,2,4)$, c	5
41	$[\frac{1}{2}S(5)^2]2$ $= [A(5){:}2]2$	$14400=2^6 3^2 5^2$	−	43	43	$4/5\,5/5$	b,i,c	5

Nr	Name	|G|	p	N	C	S	Generators	Blocks
42	$\frac{1}{2}[S(5)^2]2$	$14400=2^6 3^2 5^2$	+	43	43	$4/5\,5/5$	b,rc	5
43	$[S(5)^2]2$	$28800=2^7 3^2 5^2$	−	43	43	$4/5\,5/5$	b,r,c	5
44	A_{10}	$1814400=\frac{10!}{2}$	+	45	45	$9/33$	$(0,1,2)$, $(0,2,3)$, $(0,3,4)$, $(0,4,5)$, $(0,5,6)$, $(0,6,7)$, $(0,7,8)$, $(0,8,9)$	
45	S_{10}	$3628800=10!$	−	45	45	$9/34$	$(0,1)$, r, $(0,3)$, $(0,4)$, f, $(0,6)$, $(0,7)$, $(0,8)$, $(0,9)$	

Degree 11:

Generators:

$$\begin{aligned} a &= (0,1,2,3,4,5,6,7,8,9,10) \\ b &= (1,3,9,5,4)(2,6,7,10,8) \end{aligned}$$

Nr	Name	|G|	p	N	C	S	Generators
1	$C(11)$ $= 11$	11=11	+	4	1		a
2	$D(11)$ $= 11{:}2$	22=2·11	−	4	2	$2/1^5$	a, $(1,10)(2,9)(3,8)(4,7)(5,6)$
3	$F_{55}(11)$ $= 11{:}5$	55=5·11	+	4	3	$5/1^2$	a,b
4	$F_{110}(11)$ $= 11{:}10$	110=2·5·11	−	4	8	$10/1$	a, $(1,2,4,8,5,10,9,7,3,6)$
5	$L(11)$ $= PSL(2,11)(11)$	$660=2^2 3{\cdot}5{\cdot}11$	+	5	8	$10/7$	a, $(2,10)(3,4)(5,9)(6,7)$
6	$M(11)$	$7920=2^4 3^2 5{\cdot}11$	+	6	8	$10/31$	a,b, $(2,6,10,7)(3,9,4,5)$
7	A_{11}	$19958400=\frac{11!}{2}$	+	8	8	$10/44$	$(0,1,2)$, $(0,2,3)$, $(0,3,4)$, $(0,4,5)$, $(0,5,6)$, $(0,6,7)$, $(0,7,8)$, $(0,8,9)$, $(0,9,10)$
8	S_{11}	39916800=11!	−	8	8	$10/45$	$(0,1)$, $(0,2)$, $(0,3)$, $(0,4)$, $(0,5)$, $(0,6)$, $(0,7)$, $(0,8)$, $(0,9)$, $(0,10)$

Degree 12:

Generators:

$$
\begin{aligned}
a &= (0,4,8)(1,5,9)(2,6,10)(3,7,11)\\
b &= (1,5)(2,10)(4,8)(7,11)\\
c &= (0,1)(2,3)\\
d &= (0,4,8)\\
e &= (0,3,6,9)(1,4,7,10)(2,5,8,11)\\
f &= (0,1)(2,3)(4,5)(6,7)(8,9)(10,11)\\
g &= (0,6)(3,9)\\
h &= (0,6)(1,7)(2,8)(3,9)(4,10)(5,11)\\
i &= (0,3)(1,10)(2,5)(4,7)(6,9)(8,11)\\
j &= (0,4,8)(2,6,10)(3,7,11)\\
k &= (1,7)(3,9)(5,11)\\
l &= (0,3)(6,9)\\
m &= (2,10)(3,11)(4,8)(5,9)\\
n &= (2,10)(4,8)\\
o &= (1,7,10)(2,5,11)(3,6,9)\\
p &= (0,2,4,6,8,10)(1,3,5,7,9,11)\\
q &= (0,3,6)(2,8,11)(4,7,10)\\
r &= (0,4,8)(2,6,10)\\
s &= (2,8)(3,9)(4,10)(5,11)\\
t &= (0,4,8)(1,5,9)\\
u &= (0,1)(2,3)(4,5)\\
v &= (0,1)(2,3)(6,7)(8,9)\\
w &= (1,11)(2,10)(3,9)(4,8)(5,7)\\
x &= (0,1)\\
y &= (0,3,6,9)\\
z &= (0,1)(4,5)\\
A &= (0,1)(6,7)\\
B &= (1,10)(2,5)(6,9)\\
C &= (0,3)(1,10)(4,7)(6,9)\\
D &= (0,1)(8,9)\\
E &= (0,2,4,6,8)(1,3,5,7,9)\\
F &= (2,4,6,8,10)(3,5,7,9,11)\\
G &= (0,3,6)\\
H &= (3,6,9)\\
I &= (0,10)(1,11)(2,8)(3,9)(4,6)(5,7)\\
J &= (0,6)(1,7)(2,10)(3,11)(4,8)(5,9)\\
K &= (0,6)(1,7)(2,8,10,4)(3,9,11,5)\\
L &= (0,3)(1,2)(4,11)(5,10)(6,9)(7,8)\\
M &= (2,6,10)(3,7,11)\\
N &= (0,6)(1,7)(3,9)(4,10)\\
O &= (0,10)(1,11)(2,4)(3,5)(6,8)(7,9)\\
P &= (0,3,6,9)(1,10,7,4)\\
Q &= (0,2)(1,3)(4,10)(5,11)(6,8)(7,9)\\
R &= (0,2)(1,3)\\
S &= (0,2,4)(1,3,5)\\
T &= (2,8)(4,10)\\
U &= (0,3,6)(4,10,7)\\
V &= (4,8)(7,11)\\
W &= (4,8)\\
X &= (0,4,8)(1,11,6)(2,9,7)(3,10,5)\\
Y &= (0,11,10)(1,9,5)(2,4,3)(6,8,7)\\
Z &= (0,3,6,9)(1,8,7,2)(4,11,10,5)\\
\mathcal{A} &= (1,7)(3,9)\\
\mathcal{B} &= (0,6)(1,7)\\
\mathcal{C} &= (0,2,4,6,8)\\
\mathcal{D} &= (0,10)(1,11)(2,8)(3,9)\\
\mathcal{E} &= (0,3)(1,7)(2,11)(4,10)(5,8)(6,9)\\
\mathcal{F} &= (1,7,5,11)(2,10)(3,9)(4,8)\\
\mathcal{G} &= (1,7,3,9,5)(2,4,6,8,10)\\
\mathcal{H} &= (0,6,3,9)(1,4,2,11,5,8,10,7)\\
\mathcal{I} &= (0,1,3,6)(2,4,7,10)(5,8,11,9)\\
\mathcal{J} &= (0,2,4)(1,3,5)(7,9,11)\\
\mathcal{K} &= (0,2,4,10,8,6)(1,3,5,11,9,7)\\
\mathcal{L} &= (1,2)(3,5)(4,6)(7,9)(8,10)\\
\mathcal{M} &= (1,2)(4,8)(5,10)(6,9)(7,11)\\
\mathcal{N} &= (2,11)(3,6)(7,10)\\
\mathcal{O} &= (0,6)(2,8)(4,10)\\
\mathcal{P} &= (0,2,4)\\
\mathcal{Q} &= (2,4,6,8,10)\\
\mathcal{R} &= (0,6)
\end{aligned}
$$

$\mathfrak{s} = (6,10)(7,11)(8,9)$
$\mathcal{T} = (0,1)(2,3)(4,11)(5,10)(6,9)(7,8)$
$\mathcal{U} = (0,10,4,2,8,6)(1,11,5,3,9,7)$
$\mathcal{V} = (0,11,1,10)(2,8)(3,9)(4,6)(5,7)$
$\mathcal{W} = (0,11)(1,10)(2,5)(3,7)(4,8)(6,9)$
$\mathcal{X} = (1,10,7)(3,6,9)$
$\mathcal{Y} = (0,11)(1,9)(2,7)(3,5)(4,10)(6,8)$
$\mathcal{Z} = (0,6)(1,7,5,11)(2,8,10,4)(3,9)$
$\mathfrak{b} = (0,6,8,2,4,10)(1,7,9,3,5,11)$
$\mathfrak{c} = (0,6,10)(1,7,11)(2,4,8)(3,5,9)$
$\mathfrak{d} = (1,5)(2,7)(4,8)(6,9)(10,11)$
$\mathfrak{e} = (0,3,6,9)(1,4,11,10,5,8,7,2)$
$\mathfrak{f} = (0,2)(1,3)(4,6,8,10)(5,7,9,11)$
$\mathfrak{g} = (0,2,10)(1,3,11)(4,6,8)(5,7,9)$
$\mathfrak{h} = (0,3,1,2)(4,10,5,11)(6,8,7,9)$
$\mathfrak{i} = (0,1,2,3,4,5,6,7,8,9,10)$
$\mathfrak{j} = (0,2)$
$\mathfrak{k} = (0,4,8)(2,10,6)$
$\mathfrak{m} = (2,8)(3,9)(4,10)(5,11)(6,7)$
$\mathfrak{n} = (2,6)(3,7)(4,8)(5,9)$
$\mathfrak{p} = (2,4)(3,5)(6,7)(8,11)(9,10)$
$\mathfrak{q} = (2,4)(3,5)(8,11)(9,10)$

$\mathfrak{s} = (0,10,11)(2,3,4)(6,7,8)$
$\mathfrak{t} = (2,3)(4,10)(5,11)(6,8)(7,9)$
$\mathfrak{u} = (2,3)(4,8)(5,9)(6,11)(7,10)$
$\mathfrak{w} = (2,3)(4,8)(5,9)(6,10)(7,11)$
$\mathfrak{x} = (2,3)(5,9)(6,11)(7,10)$
$\mathfrak{z} = (2,3)(6,11)(7,10)$
$\mathfrak{A} = (0,3)(4,7)(8,11)$
$\mathfrak{B} = (0,3)(4,7)$
$\mathfrak{C} = (3,9)$
$\mathfrak{D} = (4,10)(5,11)(6,7)(8,9)$
$\mathfrak{E} = (4,8)(5,9)(6,10)(7,11)$
$\mathfrak{F} = (4,8)(5,9)$
$\mathfrak{G} = (4,7)(6,9)(8,11)$
$\mathfrak{H} = (6,9)$

Blocks:

$2 = [0,1]$
$2a = [0,6]$
$2b = [0,3]$
$2c = [0,9]$
$2d = [0,7]$
$2e = [0,10]$
$2f = [0,11]$
$2g = [0,2]$
$3 = [0,4,8]$
$4 = [0,3,6,9]$
$4a = [0,1,6,7]$
$4b = [0,1,2,3]$
$4c = [0,5,6,11]$
$4d = [0,1,10,11]$
$4e = [0,3,5,11]$
$6 = [0,2,4,6,8,10]$
$6a = [0,1,4,5,8,9]$
$6b = [0,3,4,7,8,11]$

Nr	Name	$\lvert G\rvert$	p	N	C	S	Generators	Blocks
1	$C(4)[\times]C(3)$	$12=2^2 3$	$-$	28	1		e,a	6,4,3,2a
2	$E(4)[\times]C(3)$ $=6\times 2$	$12=2^2 3$	$+$	83	2		i,h,a	6b,6,2c,6a,4,3,2a,2b
3	$D_6(6)[\times]2$ $=\frac{1}{2}[3{:}2]E(4)$	$12=2^2 3$	$+$	81	3		a,I,f	2b,4b,6b,2g,6,6a,3, 2d,4a,2a,2f,4d,2e,2
4	$A_4(12)$	$12=2^2 3$	$+$	127	4		Y,X	[0,1,2],[0,10,11],2a,4,3,[0,5,7],2b,2c
5	$\frac{1}{2}[3{:}2]4$	$12=2^2 3$	$-$	81	5		a,h,Z	4c,6,4,3,4a,2a
6	$A_4(12)\times 2$	$24=2^3 3$	$+$	49	6	$2/1^4$	$Y,X,\mathcal{E}$	2a,4,2b,2c
7	$A_4(6)[\times]2$ $=[\frac{1}{8}2^6]3$	$24=2^3 3$	$+$	48	25	$2/1^4$	s,a,f	6,2d,4a,2a,2
8	$S_4(12d)$	$24=2^3 3$	$-$	22	8	$2/1^5$	$\mathcal{L},\mathcal{I}$	[0,8,10],[0,7,9],4e,2f
9	$\frac{1}{2}[\frac{1}{8}2^6]S(3)$ $=S_4(12e)$	$24=2^3 3$	$+$	48	21	$2/1^4$	N,a,L	4c,6,2c,4,4a,2a,2b
10	$S(3)[\times]E(4)$	$24=2^3 3$	$+$	83	10	$2/1^4$	a,b,i,h	6b,6,2c,6a,4,3,2a,2b
11	$S(3)[\times]C(4)$	$24=2^3 3$	$-$	28	11	$2/1^4$	a,b,e	6,4,3,2a
12	$\frac{1}{2}[3{:}2]cD(4)$	$24=2^3 3$	$-$	28	12	$2/1^5$	a,e,w	6,4,3,2a
13	$\frac{1}{2}[3{:}2]eD(4)$	$24=2^3 3$	$-$	28	13	$2/1^5$	a,i,h,w	6,4,3,2a
14	$D(4)[\times]C(3)$	$24=2^3 3$	$-$	28	14	$2/1^3$	e,k,a	6,4,3,2a
15	$\frac{1}{2}[3{:}2]dD(4)$	$24=2^3 3$	$-$	81	15	$2/1^3$	$a,\mathcal{O},k,L$	4c,6,4,3,4a,2a
16	$[3^2]E(4)$	$36=2^2 3^2$	$+$	156	16	$3/1^2$	t,i,h	6b,2e,6,6a,3,2g,2a
17	$[3^2]4$	$36=2^2 3^2$	$-$	156	17	$3/1^2$	t,e	2e,6,3,2g,2a
18	$[3^2]E(4)$	$36=2^2 3^2$	$+$	81	18	$3/1^2$	r,i,h	6b,6,6a,3,2a
19	$[3^2]4$	$36=2^2 3^2$	$-$	81	19	$3/1^2$	r,e	6,3,2a
20	$A(4)[\times]C(3)$	$36=2^2 3^2$	$+$	83	45	$3/1^3$	q,o,a	4,3
21	$\frac{1}{2}[\frac{1}{4}2^6]S(3)$	$48=2^4 3$	$+$	86	21	$2/1^4$	g,a,L	4c,6,2c,4,4a,2a,2b
22	$S_4(12d)\times 2$	$48=2^4 3$	$-$	49	22	$2/1\,4/2^2$	$\mathcal{L},\mathcal{I},\mathcal{Y}$	4e,2f

Nr	Name	|G|	p	N	C	S	Generators	Blocks
23	$S_4(6d)[\times]2$ $=[\frac{1}{8}2^6]S(3)$	$48=2^4 3$	+	48	48	$4/2^2$	s,a,m,f	6,2d,4a,2a,2
24	$S_4(6c)[\times]2$	$48=2^4 3$	+	48	48	$4/1^2$	s,a,J,f	6,2d,4a,2a,2
25	$2A_4(6)[\times]2$ $=[\frac{1}{4}2^6]3$	$48=2^4 3$	+	86	25	$2/1^4$	$\mathcal{B}$,a,f	6,2d,4a,2a,2
26	$A_4(12)\times 2^2$	$48=2^4 3$	+	127	90	$4/2^2$	Y,X,$\mathcal{E}$, $(0,6)(1,4)(2,5)(3,9)(7,10)(8,11)$	2a,4,2b,2c
27	$[2]S_4(6)_2$	$48=2^4 3$	−	49	27	$2/1\,4/1^2$	$\mathcal{E}$,Y,X, $(0,2,3,11)(1,4,7,10)(5,6,8,9)$	4,2b
28	$D(4)[\times]S(3)$	$48=2^4 3$	−	28	28	$2/1^3\,4/2$	e,k,a,b	6,4,3,2a
29	$[\frac{1}{2}4^2]3$	$48=2^4 3$	−	86	29	$2/1^4$	N,e,a	6,4,2a
30	$\frac{1}{2}[\frac{1}{4}4^3]S(3)$	$48=2^4 3$	−	86	30	$2/1^4$	g,a,Z	4c,6,4,4a,2a
31	$[4^2]3$	$48=2^4 3$	+	185	94	$4/1^2$	P,a	4,2a
32	$[E(4)^2]3$	$48=2^4 3$	+	239	90	$4/2^2$	C,N,a	2c,4,2a,2b
33	$A_5(12)$	$60=2^2 3{\cdot}5$	+	124	76	$5/1^2$	E, $(0,10,4)(1,11,5)(2,7,9)(3,6,8)$	2
34	F_{36}:2(12e)	$72=2^3 3^2$	+	77	77	$2/1^2\,3/2^2$	p, $(0,9)(1,8)(2,3)(4,5)(6,7)(10,11)$	6b,6,6a,3,2
35	$[D_6^2]2 = D_6 \wr 2$	$72=2^3 3^2$	−	156	35	$6/2$	r, $(0,10)(2,8)(4,6)$, f	2g,6,3,2a,2e
36	F_{36}:2(12d)	$72=2^3 3^2$	−	78	125	$2/1^2\,6/1$	p, $(0,8)(1,9)(2,3)(6,7)(10,11)$	6a,3,2
37	$[3^2{:}2]E(4)$	$72=2^3 3^2$	+	125	77	$2/1^2\,3/2^2$	r,b,i,h	6b,6,6a,3,2a
38	$\frac{1}{2}[3^2{:}2]cD(4)$	$72=2^3 3^2$	−	81	125	$2/1^2\,6/2$	r,e,w	6,3,2a
39	$[3^2{:}2]4$	$72=2^3 3^2$	−	125	79	$2/1^2\,3/2^2$	r,b,e	6,3,2a
40	$F_{36}(6)[\times]2$	$72=2^3 3^2$	+	125	77	$2/1^2\,3/2^2$	t,m,K,f	6b,6,6a,3,2
41	$\frac{1}{2}[(\frac{1}{4}2^3)^2]F_{36}(6)$	$72=2^3 3^2$	−	125	79	$2/1^2\,3/2^2$	f,t,m,$\mathcal{U}_3$	6a,3,2
42	$[3^2]D(4) = 6 \wr 2$	$72=2^3 3^2$	−	81	42	$6/1$	r,e,k	6,3,2a
43	$A(4)[\times]S(3)$	$72=2^3 3^2$	+	83	83	$2/1\,3/1\,6/1$	q,o,a,b	4,3
44	$\frac{1}{2}[3{:}2]S(4)$	$72=2^3 3^2$	−	83	83	$2/1\,3/2\,6/2$	a,q,o,w	4,3
45	$S(4)[\times]C(3)$	$72=2^3 3^2$	−	83	45	$3/2^3$	e,B,a	4,3

Nr	Name	|G|	p	N	C	S	Generators	Blocks
46	$[(\frac{1}{3}3^3){:}2]4_4$	$72{=}2^3 3^2$	+	84	264	$2/1\,3/2^3$	j,b,$\mathcal{H}$	6b,3
47	$[(\frac{1}{3}3^3){:}2]E(4)_4$	$72{=}2^3 3^2$	+	157	261	$2/1\,3/2^3$	j,b,$\mathcal{H}\mathcal{H}$, $(0,9)(1,4,5,8)(2,7,10,11)(3,6)$	6b,6,6a,3
48	$2S_4(6)[\times]2$ $= [\frac{1}{4}2^6]S(3)$	$96{=}2^5 3$	+	86	48	$4/3^2$	$\mathcal{B}$,a,m,f	6,2d,4a,2a,2
49	$[2]2S_4(6)_2$	$96{=}2^5 3$	−	49	250	$2/1\,8/4$	$\mathcal{Y}$,$\mathcal{L}$,$\mathcal{I}$, $(0,3,11,5)(1,2,9,7)(4,8,10,6)$	4e,2f
50	$\frac{1}{2}e[1/16.D(4)^3]S(3)$	$96{=}2^5 3$	−	86	135	$2/1^5$	g,k,a,L	4c,6,4,4a,2a
51	$[1/16.D(4)^3]3$	$96{=}2^5 3$	−	86	134	$2/1^5$	g,i,k,a	6,4,2a
52	$\frac{1}{2}c[1/16.D(4)^3]S(3)$	$96{=}2^5 3$	−	86	193	$2/1\,4/3^2$	g,i,a,w	6,4,2a
53	$[\frac{1}{2}4^2]S(3)$	$96{=}2^5 3$	−	86	53	$4/3^2$	N,e,a,b	6,4,2a
54	$[(\frac{1}{2}2^2)^3]D(6)_4$	$96{=}2^5 3$	−	86	193	$2/1\,4/3^2$	c,a, $(2,3)(4,9)(5,8)(6,10)(7,11)$, L	4b,6a,2
55	$[\frac{1}{2}4^3]3$	$96{=}2^5 3$	+	185	94	$4/1^2$	g,P,a	4,2a
56	$[\frac{1}{2}2^6]3$	$96{=}2^5 3$	+	186	90	$4/2^2$	g,C,a	2c,4,2a,2b
57	$[(\frac{1}{2}2^2)^3]A_4(6)_4$	$96{=}2^5 3$	+	143	222	$2/1\,4/1\,4/2$	c,a, $(0,3,1,2)(4,7)(5,6)(8,9)$	4b,2
58	$[2^4]6$	$96{=}2^5 3$	+	136	134	$2/1^5$	z,D,p	6a,4a,2
59	$[2^3]A_4(6)$	$96{=}2^5 3$	−	137	222	$2/1\,4/3^2$	v,u,s,a	4a,2
60	$[\frac{1}{2}[\frac{1}{2}2^2]^3]2A_4(6)_4$	$96{=}2^5 3$	+	138	222	$2/1\,4/3^2$	v,p,$\mathfrak{D}$	4a,2
61	$[2^3]A_4(6)_4$	$96{=}2^5 3$	−	140	222	$2/1\,4/3^2$	v,u,a, $(2,8)(3,9)(4,11)(5,10)(6,7)$	4a,2
62	$[4^2]S(3)$	$96{=}2^5 3$	+	185	150	$8/4$	P,a,b	4,2a
63	$[\frac{1}{2}[\frac{1}{2}2^2]^3]S_4(6d)_8 b$	$96{=}2^5 3$	+	185	150	$8/5$	v,a,$\mathfrak{D}$L	4a,2
64	$[\frac{1}{2}[\frac{1}{2}2^2]^3]S_4(6d)_8 a$	$96{=}2^5 3$	−	140	250	$2/1\,8/2$	v,a, $(0,3)(1,2)(4,5)(6,9)(7,8)$	4a,2
65	$[\frac{1}{2}[\frac{1}{2}2^2]^3]S_4(6c)_4$	$96{=}2^5 3$	+	138	250	$2/1\,8/1$	v,a,Q, $(0,4)(1,5)(2,9)(3,8)(6,11)(7,10)$	4a,2
66	$[\frac{1}{2}[\frac{1}{2}2^2]^3]S_4(6d)_2$	$96{=}2^5 3$	−	137	250	$2/1\,8/4$	v,a,IJ,$\mathfrak{p}$	4a,2
67	$[E(4)^2]S(3)$	$96{=}2^5 3$	+	239	139	$8/3$	C,N,a,b	2c,4,2a,2b
68	$[\frac{1}{2}[\frac{1}{2}2^2]^3]S_4(6c)$	$96{=}2^5 3$	+	186	139	$8/2$	v,s,a,J	2d,4a,2a,2
69	$[2^4]D_6(6)$	$96{=}2^5 3$	+	195	135	$2/1^5$	z,D,a,I	4b,6a,4a,4d,2

Nr	Name	|G|	p	N	C	S	Generators	Blocks
70	$\frac{1}{2}[3^3{:}2]E(4)$	$108{=}2^2 3^3$	+	156	130	$3/1^3$	j,L,h	6b,6,6a,3
71	$[3^3]E(4)$	$108{=}2^2 3^3$	+	258	130	$3/1^3$	j,i,h	6b,6,6a,3
72	$[3^3]4$	$108{=}2^2 3^3$	−	217	131	$3/1^3$	j,e	6,3
73	$\frac{1}{2}[3^3{:}2]4$	$108{=}2^2 3^3$	−	156	131	$3/1^3$	j,h,Z	6,3
74	$S_5(12)$	$120{=}2^3 3{\cdot}5$	+	123	219	$5/2^2$	F, $(0,3)(1,10)(2,7)(4,5)(6,11)(8,9)$	6,2
75	$L(6)[\times]2$	$120{=}2^3 3{\cdot}5$	+	123	219	$5/2^2$	E,$\mathcal{D}$,f	6,2
76	$[2]L(6)_6$	$120{=}2^3 3{\cdot}5$	+	124	76	$5/2^2$	f,F,$\mathcal{T}$f, $(0,3)(1,2)(4,11)(5,10)$	2
77	$[S(3)^2]E(4)$	$144{=}2^4 3^2$	+	125	77	$2/1^2\, 3/2^2$	r,n,i,h	6b,6,6a,3,2a
78	$[2]F_{36}{:}2_2\{S_3^2\}$	$144{=}2^4 3^2$	−	125	125	$2/1^2\, 6/3$	f,p,$\mathcal{K}$,$\mathfrak{z}$	6a,3,2
79	$[S(3)^2]4$	$144{=}2^4 3^2$	−	125	79	$2/1^2\, 3/2^2$	r,n,e	6,3,2a
80	$[2]F_{36}{:}2_2\{3^2{:}4\}$	$144{=}2^4 3^2$	−	125	125	$2/1^2\, 6/3$	f,M,f,$\mathfrak{z}$	6a,3,2
81	$[3^2{:}2]D(4)$	$144{=}2^4 3^2$	−	125	125	$2/1^2\, 6/3$	r,b,e,k	6,3,2a
82	$[(\frac{1}{4}2^3)^2]F_{36}(6)$	$144{=}2^4 3^2$	−	125	125	$2/1^2\, 6/3$	$(0,1)(4,5)(8,9)$, t,m,K	6a,3,2
83	$S(4)[\times]S(3)$	$144{=}2^4 3^2$	−	83	83	$2/1\, 3/2\, 6/3$	e,B,a,b	4,3
84	$[(\frac{1}{3}3^3){:}2]D(4)_4$	$144{=}2^4 3^2$	+	84	274	$2/1\, 3/2\, 6/3$	j,b,$\mathcal{H}$, $(0,7)(3,4)(6,10)(8,11)$	6b,3
85	$[\frac{1}{4}E(4)^3{:}3]3$	$144{=}2^4 3^2$	+	165	292	$3/1\, 4/4^2$	C,o,a	4
86	$[1/16.D(4)^3]S(3)$	$192{=}2^6 3$	−	86	193	$2/1\, 4/3^2$	g,i,k,a,b	6,4,2a
87	$[2^5]6$	$192{=}2^6 3$	+	193	134	$2/1^5$	c,p	6a,4a,2
88	$[2^4]A_4(6)$	$192{=}2^6 3$	−	186	222	$2/1\, 4/3^2$	A,u,a,g	4a,2
89	$[(\frac{1}{2}2^2)^3]2A_4(6)_4\{n4\}$	$192{=}2^6 3$	+	185	222	$2/1\, 4/3^2$	c,b, $(0,1)(4,6)(5,7)(10,11)$	4b,2
90	$[E(4)^3]3 = E(4) \wr 3$	$192{=}2^6 3$	+	239	90	$4/2^2$	l,g,a	2c,4,2a,2b
91	$[(\frac{1}{2}2^2)^3]2A_4(6)_4\{n2\}$	$192{=}2^6 3$	+	143	222	$2/1\, 4/1\, 4/3$	c,b, $(6,7)(8,10,9,11)$	4b,2
92	$[2^4]A_4(6)_4\{n4\}$	$192{=}2^6 3$	−	185	222	$2/1\, 4/3^2$	A,u,a,m	4a,2
93	$[2^4]A_4(6)_4\{n2\}$	$192{=}2^6 3$	−	143	222	$2/1\, 4/3^2$	A,u,a, $(2,8,3,9)(4,10)(5,11)$	4a,2
94	$[4^3]3 = 4 \wr 3$	$192{=}2^6 3$	−	185	94	$4/1^2$	y,a	4,2a

Nr	Name	|G|	p	N	C	S	Generators	Blocks
95	$[\frac{1}{2}4^3]S(3)$	$192=2^6 3$	+	185	150	$^8/_{11}$	g,P,a,b	4,2a
96	$[(\frac{1}{2}2^2)^3]S_4(6d)_8$	$192=2^6 3$	−	185	250	$^2/_1{}^8/_{11}$	c,a,t	4b,2
97	$[(\frac{1}{2}2^2)^3]S_4(6c)_4$	$192=2^6 3$	+	185	250	$^2/_1{}^8/_7$	c,a, $(0,2)(1,3)(4,8)(5,9)(6,11)(7,10)$	4b,2
98	$\frac{1}{2}[4^3]S(3)$	$192=2^6 3$	−	185	150	$^8/_7$	g,P,a,Z	4,2a
99	$[(\frac{1}{2}2^2)^3]2A_4(6)_2$	$192=2^6 3$	−	186	222	$^2/_1{}^4/_3{}^2$	c,a,wt, $(2,3)(4,5)(8,10,9,11)$	4b,2
100	$[(\frac{1}{2}2^2)^3]S_4(6d)_2$	$192=2^6 3$	−	186	250	$^2/_1{}^8/_9$	c,a,c,u	4b,2
101	$[\frac{1}{2}2^6]S(3)$	$192=2^6 3$	+	186	139	$^8/_9$	g,C,a,b	2c,4,2a,2b
102	$[(\frac{1}{2}2^2)^3]S_4(6c)_2$	$192=2^6 3$	−	186	250	$^2/_1{}^8/_{10}$	c,a,c, $(0,3,1,2)(4,8,5,9)(6,11,7,10)$	4b,2
103	$\frac{1}{2}[E(4)^3]S(3)$	$192=2^6 3$	+	186	139	$^8/_{10}$	l,N,a,hb	2c,4,2a,2b
104	$[(\frac{1}{2}2^2)^3]2A_4(6)_8$	$192=2^6 3$	−	143	222	$^2/_1{}^4/_2{}^4/_3$	c,a, $(6,7)(8,10)(9,11)$	4b,2
105	$\frac{1}{2}[2^6]6$	$192=2^6 3$	−	193	134	$^2/_1{}^5$	c,$\mathcal{V}$m	6a,4a,2
106	$[2^5]D_6(6)$	$192=2^6 3$	+	240	135	$^2/_1{}^5$	c,z,A,a,I	4b,6a,4a,4d,2
107	$\frac{1}{2}[2^6]D_6$	$192=2^6 3$	−	240	135	$^2/_1{}^5$	c,z,A,a,$\mathcal{V}$	4b,6a,4a,4d,2
108	$\frac{1}{2}[2^5]D(6)$	$192=2^6 3$	+	136	193	$^2/_1{}^4/_1{}^4/_3$	z,D,p,cI	6a,4a,2
109	$[2^4]D(6)$	$192=2^6 3$	+	136	193	$^2/_1{}^4/_2{}^4/_3$	z,D,p,I	6a,4a,2
110	$[2^3]S_4(6d)$	$192=2^6 3$	−	137	250	$^2/_1{}^8/_9$	v,u,s,a,m	4a,2
111	$[2^3]S_4(6)_2$	$192=2^6 3$	−	137	250	$^2/_1{}^8/_{11}$	v,u,a,g,p	4a,2
112	$[\frac{1}{2}[\frac{1}{2}2^2]^3]2S_4(6)_8$	$192=2^6 3$	+	138	250	$^2/_1{}^8/_8$	v,a,Q, $(2,3)(4,10)(5,11)(6,7)$	4a,2
113	$[\frac{1}{2}[\frac{1}{2}2^2]^3]2S_4(6)_4$	$192=2^6 3$	+	138	250	$^2/_1{}^8/_6$	v,p,Q,$\mathfrak{D}$	4a,2
114	$[2^3]S_4(6)_4$	$192=2^6 3$	−	140	250	$^2/_1{}^8/_9$	v,u,a,m,q	4a,2
115	$[2^3]S_4(6)_8$	$192=2^6 3$	−	140	250	$^2/_1{}^8/_{11}$	v,u,a,mm	4a,2
116	$[3^3]D(4)$	$216=2^3 3^3$	−	217	167	$^3/_1{}^6/_5$	j,e,k	6,3
117	$[3^3{:}2]E(4)$	$216=2^3 3^3$	+	213	261	$^2/_1{}^3/_2{}^3$	j,b,i,h	6b,6,6a,3
118	$\frac{1}{2}[3^3{:}2]eD(4)$	$216=2^3 3^3$	−	156	274	$^2/_1{}^3/_2{}^6/_5$	j,i,h,w	6,3

Nr	Name	|G|	p	N	C	S	Generators	Blocks
119	$[3^3{:}2]4$	$216{=}2^3 3^3$	−	156	264	$2/1\, 3/2^3$	j,b,e	6,3
120	$\frac{1}{2}[3^3{:}2]\mathrm{cD}(4)$	$216{=}2^3 3^3$	−	156	274	$2/1\, 3/2\, 6/5$	j,e,w	6,3
121	$\frac{1}{2}[3^3{:}2]\mathrm{dD}(4)$	$216{=}2^3 3^3$	−	156	167	$3/1\, 6/5$	j,$\mathcal{O}$,k,L	6,3
122	$[(\frac{1}{3}3^3){:}2]\mathrm{A}(4)_4$	$216{=}2^3 3^3$	+	157	289	$2/1\, 9/4$	j,b,s,$q^{-1}\mathcal{Z}$	3
123	$\mathrm{L}(6){:}2[\times]2$	$240{=}2^4 3{\cdot}5$	+	123	219	$5/3^2$	E,O,f	6,2
124	$[2]\mathrm{L}(6){:}2_{12}$	$240{=}2^4 3{\cdot}5$	−	124	293	$10/4$	f,F, $(0,2,1,3)(4,6,5,7)(8,11,9,10)$	2
125	$[\mathrm{S}(3)^2]\mathrm{D}(4)$ $= \mathrm{D}(6) \wr 2$	$288{=}2^5 3^2$	−	125	125	$2/1^2\, 6/3$	r,n,e,k	6,3,2a
126	$[\mathrm{A}_4^2]2 = \mathrm{A}_4 \wr 2$	$288{=}2^5 3^2$	+	195	208	$2/1^2\, 6/4$	T,r,f	6,2a
127	$[\frac{1}{4}\mathrm{E}(4)^3{:}3]\mathrm{S}(3)_2$	$288{=}2^5 3^2$	−	165	294	$3/2\, 8/14$	C,o,a,$\mathcal{M}$	4
128	$[\frac{1}{4}\mathrm{E}(4)^3{:}3]\mathrm{S}(3)$	$288{=}2^5 3^2$	+	165	294	$3/1\, 8/13$	C,o,a,b	4
129	$[\frac{1}{4}\mathrm{E}(4)^3{:}3{:}2]3$	$288{=}2^5 3^2$	−	165	292	$3/2\, 4/5^2$	C,o,$\mathfrak{G}$,a	4
130	$[3^4]\mathrm{E}(4)$ $= 3 \wr \mathrm{E}(4)$	$324{=}2^2 3^4$	+	258	130	$3/1^3$	d,i,h	6b,6,6a,3
131	$[3^4]4 = 3 \wr 4$	$324{=}2^2 3^4$	−	217	131	$3/1^3$	d,e	6,3
132	$\frac{1}{3}[3^4]\mathrm{A}(4)$	$324{=}2^2 3^4$	+	233	231	$9/6$	j,i,h,od	3
133	$[3^3]\mathrm{A}(4)$	$324{=}2^2 3^4$	+	258	231	$9/7$	j,q,o	3
134	$[2^6]6 = 2 \wr 6$	$384{=}2^7 3$	−	193	134	$2/1^5$	x,p	6a,4a,2
135	$[2^6]\mathrm{D}_6$ $= 2 \wr \mathrm{D}_6(6)$	$384{=}2^7 3$	−	240	135	$2/1^5$	x,a,I	4b,6a,4a,4d,2
136	$[2^5]\mathrm{D}(6)$	$384{=}2^7 3$	+	193	193	$2/1\, 4/3^2$	c,p,I	6a,4a,2
137	$[2^4]\mathrm{S}_4(6\mathrm{d})$	$384{=}2^7 3$	−	186	250	$2/1\, 8/22$	A,u,s,a,m	4a,2
138	$[(\frac{1}{2}2^2)^3]2\mathrm{S}_4(6)_4$	$384{=}2^7 3$	+	185	250	$2/1\, 8/15$	c,$\mathcal{U}$,$\mathfrak{E}$, $(4,10)(5,11)(6,9)(7,8)$	4b,2
139	$[\mathrm{E}(4)^3]\mathrm{S}(3) = \mathrm{E}(4) \wr \mathrm{S}(3)$	$384{=}2^7 3$	+	239	139	$8/18$	l,g,a,b	2c,4,2a,2b
140	$[2^4]\mathrm{S}_4(6\mathrm{d})_4$	$384{=}2^7 3$	−	185	250	$2/1\, 8/22$	A,u,a,m,q	4a,2
141	$[\frac{1}{4}\mathrm{cD}(4)^3]3$	$384{=}2^7 3$	−	185	222	$2/1\, 4/3^2$	y,k,a	4,2a

Nr	Name	$\lvert G\rvert$	p	N	C	S	Generators	Blocks
142	$[\frac{1}{4}eD(4)^3]3$	$384=2^7 3$	−	186	222	$2/1\ 4/3^2$	l,g,k,a	4,2a
143	$[2^4]2A_4(6)_4$	$384=2^7 3$	−	143	222	$2/1\ 4/3^2$	$A,u,p,\ (4,10)(5,11)(6,7)$	4a,2
144	$[2^5]A_4(6)$	$384=2^7 3$	+	250	222	$2/1\ 4/3^2$	c,s,a	4a,2
145	$\frac{1}{2}[2^6]D(6)$	$384=2^7 3$	−	193	193	$2/1\ 4/3^2$	$c,p,\mathcal{V}$	6a,4a,2
146	$[2^4]S_4(6c)$	$384=2^7 3$	−	186	250	$2/1\ 8/20$	A,u,s,a,J	4a,2
147	$[(\frac{1}{2}2^2)^3]2S_4(6)_8$	$384=2^7 3$	−	185	250	$2/1\ 8/15$	$c,\mathcal{U},t$	4b,2
148	$\frac{1}{2}[\frac{1}{4}eD(4)^3]S(3)$	$384=2^7 3$	−	186	250	$2/1\ 8/18$	l,a,w	4,2a
149	$[2^4]S_4(6c)_4$	$384=2^7 3$	−	185	250	$2/1\ 8/16$	A,u,a,Q,m	4a,2
150	$[4^3]S(3) = 4 \wr S(3)$	$384=2^7 3$	−	185	150	$8/17$	y,a,b	4,2a
151	$\frac{1}{2}[\frac{1}{4}cD(4)^3]S(3)$	$384=2^7 3$	−	185	250	$2/1\ 8/17$	y,a,w	4,2a
152	$[(\frac{1}{2}2^2)^3]2S_4(6)_2\{S_4(6c)\}$	$384=2^7 3$	−	186	250	$2/1\ 8/19$	$c,a,\mathcal{UD},u$	4b,2
153	$[(\frac{1}{2}2^2)^3]2S_4(6)_2\{S_4(6d)\}$	$384=2^7 3$	−	186	250	$2/1\ 8/19$	$c,a,\mathcal{D}a,\ (0,3,1,2)(4,6,5,7)(8,10,9,11)$	4b,2
154	$[2^5]D(6)_2 t$	$384=2^7 3$	−	193	193	$2/1\ 4/3^2$	$c,a,Q,\mathfrak{w}$	4b,6a,2
155	$[2^5]D(6)_2 i$	$384=2^7 3$	−	193	193	$2/1\ 4/3^2$	$c,a,\mathfrak{E},\mathfrak{h}$	4b,6a,2
156	$[3^3{:}2]D(4)$	$432=2^4 3^3$	−	156	274	$2/1\ 3/2\ 6/9$	j,b,e,k	6,3
157	$[(\frac{1}{3}3^3){:}2]S(4)_4$	$432=2^4 3^3$	+	157	289	$2/1\ 9/8$	$j,b,\mathcal{H},\mathfrak{s}$	3
158	$[2^5]F_{18}(6)$	$576=2^6 3^2$	+	240	208	$2/1^2\ 6/6$	c,t,h	6a,2
159	$[2^5]F_{18}(6)_2$	$576=2^6 3^2$	−	240	208	$2/1^2\ 6/6$	$c,t,M,\mathfrak{h}$	6a,2
160	$\frac{1}{2}[S_4(6c)^2]2$	$576=2^6 3^2$	−	235	260	$4/1\ 6/8$	$T,r,J,\ (0,7,6,1)(2,11,10,3)(4,9,8,5)$	6,2a
161	$[\frac{1}{2}S_4(6c)^2]2$	$576=2^6 3^2$	+	235	260	$4/1\ 6/8$	T,r,J,f	6,2a
162	$[2^4]F_{36}(6)$	$576=2^6 3^2$	+	236	260	$4/2\ 6/7$	z,D,t,m,K	6a,2
163	$[2^4]F_{18}(6){:}2$	$576=2^6 3^2$	+	236	260	$4/2\ 6/7$	z,D,t,m,h	6a,2
164	$[\frac{1}{9}A(4)^3]3$	$576=2^6 3^2$	+	268	292	$3/1\ 4/4^2$	l,g,q,a	4
165	$[\frac{1}{4}E(4)^3{:}3{:}2]3$	$576=2^6 3^2$	−	165	294	$3/2\ 8/24$	$C,o,\mathfrak{G},a,b$	4

Nr	Name	|G|	p	N	C	S	Generators	Blocks
166	$[\frac{1}{9}A(4)^3]3_3$	$576=2^6 3^2$	+	254	292	$3/1\,4/4^2$	$l,g,q,a^{-1}H$	4
167	$[3^4]D(4)$	$648=2^3 3^4$	−	217	167	$3/1\,6/5$	d,e,k	6,3
	$= 3 \wr D(4)$							
168	$[3^4{:}2]E(4)$	$648=2^3 3^4$	+	281	261	$2/1\,3/2^3$	d,b,i,h	6b,6,6a,3
169	$\frac{1}{2}[3^4{:}2]cD(4)$	$648=2^3 3^4$	−	217	274	$2/1\,3/2\,6/5$	d,e,w	6,3
170	$[3^4{:}2]4$	$648=2^3 3^4$	−	248	264	$2/1\,3/2^3$	d,b,e	6,3
171	$[3^4{:}2]E(4)_2$	$648=2^3 3^4$	+	267	261	$2/1\,3/2^3$	$d,b,i,\mathcal{Z}$	6b,6,6a,3
172	$\frac{1}{2}[3^4{:}2^2]E(4)$	$648=2^3 3^4$	+	266	261	$2/1\,3/2^3$	d,b,i,nh	6b,6,6a,3
173	$[3^4{:}2]4_4$	$648=2^3 3^4$	+	243	264	$2/1\,3/2^3$	$d,b,V\mathfrak{e}$	6,3
174	$[3^4{:}2]E(4)_4$	$648=2^3 3^4$	+	282	261	$2/1\,3/2^3$	$d,b,(0,3)(1,10,5,2)(4,7,8,11)(6,9),\mathcal{Z}$	6b,6,6a,3
175	$[3^3]S(4)$	$648=2^3 3^4$	−	258	231	$9/12$	j,e,B	3
176	$[3^3{:}2]A(4)$	$648=2^3 3^4$	+	213	289	$2/1\,9/13$	j,b,q,o	3
177	$[3^3]S(4)_6$	$648=2^3 3^4$	−	177	289	$2/1\,9/10$	$j,i,(0,11)(3,8)(4,7)(5,9)(6,10),uM$	3
178	$\frac{1}{2}[3^3{:}2]S(4)$	$648=2^3 3^4$	−	213	289	$2/1\,9/11$	j,q,o,w	3
179	$L(2,11)$	$660=2^2 3{\cdot}5{\cdot}11$	+	218	301	$11/3$	$i,\mathcal{W}$	
180	$A(6)[\times]2$	$720=2^4 3^2 5$	+	219	219	$5/4^2$	S,F,f	6,2
181	$M_{10}(12)$	$720=2^4 3^2 5$	+	220	299	$5/4\,6/12$	$\mathcal{J},\mathcal{G},(0,1)(2,3,4,5)(6,11,8,9)(7,10)$	6
	$= [A_6[\frac{1}{360}]\{M_{10}\}A_6]2_2$							
182	$PGL(2,9)(12)$	$720=2^4 3^2 5$	+	220	299	$5/4\,6/12$	$\mathcal{J},\mathcal{G},\mathcal{T}$	6
	$= [A_6[\frac{1}{360}]\{M_{10}\}A_6]2$							
183	$S_6(12)$	$720=2^4 3^2 5$	+	219	219	$5/4^2$	$S,F,(0,1)(2,3)(4,5)(6,7)(8,11)(9,10)$	6,2
184	$[2^5]S_4(6d)$	$768=2^8 3$	+	250	250	$2/1\,8/31$	c,s,a,m	4a,2
185	$[\frac{1}{4}cD(4)^3]S(3)$	$768=2^8 3$	−	185	250	$2/1\,8/26$	y,k,a,b	4,2a
186	$[\frac{1}{4}eD(4)^3]S(3)$	$768=2^8 3$	−	186	250	$2/1\,8/29$	l,g,k,a,b	4,2a
187	$[2^5]2A_4(6)$	$768=2^8 3$	+	250	222	$2/1\,4/3^2$	$c,\mathcal{B},a$	4a,2

Nr	Name	|G|	p	N	C	S	Generators	Blocks
188	$[2^6]A_4$	$768=2^8 3$	−	250	222	$2/1\,4/3^2$	x,s,a	4a,2
	$= 2 \wr A_4(6)$							
189	$[\frac{1}{2}cD(4)^3]3$	$768=2^8 3$	−	250	222	$2/1\,4/3^2$	y,$\mathcal{A}$,a	4,2a
190	$\frac{1}{2}[2^6]S_4(6d)$	$768=2^8 3$	−	250	250	$2/1\,8/31$	c,s,a,xm	4a,2
191	$[2^5]S_4(6c)$	$768=2^8 3$	+	250	250	$2/1\,8/27$	c,s,a,J	4a,2
192	$\frac{1}{2}[2^6]S_4(6c)$	$768=2^8 3$	−	250	250	$2/1\,8/27$	c,s,a,xJ	4a,2
193	$[2^6]D(6)$	$768=2^8 3$	−	193	193	$2/1\,4/3^2$	x,p,I	6a,4a,2
	$= 2 \wr D(6)$							
194	$[3^4]A(4)$	$972=2^2 3^5$	+	258	231	$9/17$	d,q,o	3
	$= 3 \wr A(4)$							
195	$[2^5]F_{18}(6){:}2$	$1152=2^7 3^2$	+	260	260	$4/3\,6/11$	c,t,m,h	6a,2
196	$[2^5]F_{18}{:}2_2$	$1152=2^7 3^2$	−	240	260	$4/3\,6/11$	c,t,p,w	6a,2
197	$\frac{1}{2}[2^6]F_{18}{:}2$	$1152=2^7 3^2$	−	260	260	$4/3\,6/11$	c,t,m,xh	6a,2
198	$\frac{1}{2}[2^6]F_{36}$	$1152=2^7 3^2$	−	260	260	$4/3\,6/11$	c,t,m,xK	6a,2
199	$[2^5]F_{36}(6)$	$1152=2^7 3^2$	+	260	260	$4/3\,6/11$	c,t,m,K	6a,2
200	$[S_4(6c)^2]2$	$1152=2^7 3^2$	−	235	260	$4/1\,6/8$	T,r,$\mathcal{R}$n,f	6,2a
	$= S_4(6c) \wr 2$							
201	$[2^4]F_{36}{:}2_4$	$1152=2^7 3^2$	−	235	260	$4/3\,6/11$	z,D,$\mathcal{K}$,M,$\mathcal{S}$	6a,2
202	$[2^4]F_{36}{:}2_2$	$1152=2^7 3^2$	+	236	260	$4/3\,6/11$	z,D,$\mathcal{K}$,M,n, $(2,3)(6,10)(7,11)(8,9)$	6a,2
203	$[S_4(6d)^2]2$	$1152=2^7 3^2$	+	236	260	$4/2\,6/7$	T,r,n,f	6,2a
	$= S_4(6d) \wr 2$							
204	$[\frac{1}{9}A(4)^3]S(3)_2$	$1152=2^7 3^2$	−	268	294	$3/2\,8/34$	l,g,q,a,$\mathcal{M}$	4
205	$[E(4)^3{:}3{:}2]3$	$1152=2^7 3^2$	−	239	292	$3/2\,4/5^2$	l,g,q,B,a	4
206	$[\frac{1}{9}A(4)^3]S(3)$	$1152=2^7 3^2$	+	239	294	$3/1\,8/33$	l,g,q,a,b	4
207	$[\frac{1}{9}A(4)^3]S(3)_6$	$1152=2^7 3^2$	−	254	294	$3/2\,8/34$	l,g,q $(1,2)(4,11)(5,7)(6,9)(8,10)$, $(0,4)(1,3)(6,10)(7,9)(8,11)$	4

Nr	Name	|G|	p	N	C	S	Generators	Blocks
208	$[2A_4^2]2$	$1152=2^7 3^2$	−	240	208	$2/1^2\ 6/6$	$\mathcal{R}$,r,f	6,2a
	$= 2A4 \wr 2$							
	$= 2 \wr F_{18}(6)$							
209	$\frac{1}{2}[3^4{:}2^2]cD(4)$	$1296=2^4 3^4$	−	248	274	$2/1\ 3/2\ 6/9$	d,b,e,nk	6,3
210	$[3^4{:}2^2]E(4)$	$1296=2^4 3^4$	+	267	261	$2/1\ 3/2^3$	d,n,i,h	6b,6,6a,3
211	$[3^4{:}2^2]4$	$1296=2^4 3^4$	−	267	264	$2/1\ 3/2^3$	d,n,e	6,3
212	$[3^4{:}2]D(4)_8$	$1296=2^4 3^4$	+	243	274	$2/1\ 3/2\ 6/9$	d,b,in,$\mathfrak{x}$	6a,3
213	$[3^3{:}2]S(4)$	$1296=2^4 3^4$	−	213	289	$2/1\ 9/18$	j,b,e,B	3
214	$[\frac{1}{2}F_{36}^2]2$	$1296=2^4 3^4$	+	266	261	$2/1\ 3/2^3$	d,n,K,f	6b,6,6a,3
215	$\frac{1}{2}[F_{36}^2]2$	$1296=2^4 3^4$	+	266	264	$2/1\ 3/2^3$	d,n,K,$\mathfrak{e}^{-1}$Q	6,3
216	$[3^4{:}2]D(4)_4$	$1296=2^4 3^4$	+	243	274	$2/1\ 3/2\ 6/9$	d,b,h,$\mathfrak{x}$	6a,3
217	$[3^4{:}2]D(4)$	$1296=2^4 3^4$	−	248	274	$2/1\ 3/2\ 6/9$	d,b,e,k	6,3
218	$PGL(2,11)$	$1320=2^3 3{\cdot}5{\cdot}11$	−	218	301	$11/4$	i,$\mathcal{W}$, $(1,2,4,8,5,10,9,7,3,6)$	
219	$S(6)[\times]2$	$1440=2^5 3^2 5$	+	219	219	$5/5^2$	R,p,f	6,2
220	$M_{10}.2(12)$	$1440=2^5 3^2 5$	+	220	299	$5/5\ 6/14$	$\mathcal{J}$,$\mathcal{G}$, $(0,2)(1,9)(3,7)(5,11)$, $\mathcal{T}$	6
	$= A_6.E_4(12)$							
	$= [S_6[\frac{1}{720}]\{M_{10}\}S_6]2$							
221	$[\frac{1}{2}cD(4)^3]S(3)$	$1536=2^9 3$	−	250	250	$2/1\ 8/35$	y,$\mathcal{A}$,a,b	4,2a
222	$[D(4)^4]3 = D(4) \wr 3$	$1536=2^9 3$	−	250	222	$2/1\ 4/3^2$	y,$\mathfrak{C}$,a	4,2a
223	$\frac{1}{2}e[D(4)^3]S(3)$	$1536=2^9 3$	−	250	250	$2/1\ 8/35$	l,g,$\mathcal{A}$,a,w	4,2a
224	$[2^6]S_4(6c)$	$1536=2^9 3$	−	250	250	$2/1\ 8/27$	x,s,a,J	4a,2
	$= 2 \wr S_4(6c)$							
225	$\frac{1}{2}c[D(4)^3]S(3)$	$1536=2^9 3$	−	250	250	$2/1\ 8/35$	y,$\mathcal{A}$,a,w	4,2a
226	$[2^5]2S_4(6)$	$1536=2^9 3$	+	250	250	$2/1\ 8/35$	c,$\mathcal{B}$,a,m	4a,2

Nr	Name	|G|	p	N	C	S	Generators	Blocks
227	$[2^6]S_4(6d) = 2 \wr S_4(6d)$	$1536=2^9 3$	−	250	250	$2/1\ 8/31$	x,s,a,m	4a,2
228	$\frac{1}{3}[A(4)^3]3$	$1728=2^6 3^3$	+	276	292	$3/1\ 4/4^2$	l,g,U,Ga	4
229	$[\frac{1}{3}A(4)^3]3$	$1728=2^6 3^3$	+	283	292	$3/1\ 4/4^2$	l,g,U,a	4
230	$[2^5]L(6)$	$1920=2^7 3{\cdot}5$	+	270	293	$10/15$	c,E,$\mathcal{D}$	2
231	$[3^4]S(4)$ $= 3 \wr S(4)$	$1944=2^3 3^5$	−	258	231	$9/20$	d,e,B	3
232	$[3^4{:}2]A(4)_4$	$1944=2^3 3^5$	+	259	289	$2/1\ 9/22$	d,b,o,Vq	3
233	$\frac{1}{2}[3^4{:}2]S(4)$	$1944=2^3 3^5$	−	258	289	$2/1\ 9/21$	d,q,o,w	3
234	$[3^4{:}2]A(4)$	$1944=2^3 3^5$	+	258	289	$2/1\ 9/22$	d,b,q,o	3
235	$[2^5]F_{36}{:}2_2\{S_3^2, t\}$	$2304=2^8 3^2$	−	260	260	$4/3\ 6/11$	c,M,p,n,$\mathcal{S}$	6a,2
236	$[2^5]F_{36}(6){:}2$	$2304=2^8 3^2$	+	260	260	$4/3\ 6/11$	c,t,$\mathfrak{F}$,h	6a,2
237	$[2^5]F_{36}{:}2_2\{S_3^2, i\}$	$2304=2^8 3^2$	−	260	260	$4/3\ 6/11$	c,M,$\mathfrak{F}$,$\mathcal{KS}$	6a,2
238	$[2^5]F_{36}{:}2_2\{3^2{:}4\}$	$2304=2^8 3^2$	−	260	260	$4/3\ 6/11$	c,M,f,$\mathcal{S}$	6a,2
239	$[E(4)^3{:}3{:}2]3$	$2304=2^8 3^2$	−	239	294	$3/2\ 8/41$	l,g,q,B,a,b	4
240	$[2^6]F_{18}{:}2$ $= 2 \wr F_{18}(6){:}2$	$2304=2^8 3^2$	−	260	260	$4/3\ 6/11$	x,t,m,h	6a,2
241	$[2^6]F_{36}$ $= 2 \wr F_{36}(6)$	$2304=2^8 3^2$	−	260	260	$4/3\ 6/11$	x,t,m,K	6a,2
242	$[3^4{:}2^3]E(4)$	$2592=2^5 3^4$	+	289	261	$2/1\ 3/2^3$	d,V,n,i,h	6b,6,6a,3
243	$[3^4{:}2^2]D(4)_4$	$2592=2^5 3^4$	+	266	274	$2/1\ 3/2\ 6/9$	d,n,i, $(1,7)(3,9)(5,11)(6,10)$	6,3
244	$\frac{1}{2}[S(3)^4]4$	$2592=2^5 3^4$	+	274	264	$2/1\ 3/2^3$	d,n,h,e	6,3
245	$[3^4{:}2^3]4$	$2592=2^5 3^4$	−	274	264	$2/1\ 3/2^3$	d,V,e	6,3
246	$\frac{1}{2}[S(3)^4]E(4)$	$2592=2^5 3^4$	−	274	261	$2/1\ 3/2^3$	d,n,i,Wh	6b,6,6a,3
247	$[3^4{:}2^2]D(4)_2$	$2592=2^5 3^4$	−	267	274	$2/1\ 3/2\ 6/10$	d,n,e,VL	6,3
248	$[3^4{:}2^2]D(4)$	$2592=2^5 3^4$	−	267	274	$2/1\ 3/2\ 6/9$	d,n,e,k	6,3
249	$[F_{36}^2]2 = F_{36} \wr 2$	$2592=2^5 3^4$	+	266	274	$2/1\ 3/2\ 6/10$	d,n,o$\mathcal{H}$,f	6,3

Nr	Name	|G|	p	N	C	S	Generators	Blocks
250	$[D(4)^4]S(3)$ $= D(4) \wr S(3)$	$3072=2^{10}3$	$-$	250	250	$2/1\ 8/35$	$y,\mathfrak{C},a,b$	4,2a
251	$[\frac{1}{3}A(4)^3]S(3)_2$	$3456=2^7 3^3$	$-$	268	294	$3/2\ 8/42$	$l,g,U,a,\mathfrak{d}$	4
252	$[\frac{1}{3}A(4)^3]S(3)$	$3456=2^7 3^3$	$+$	283	294	$3/1\ 8/42$	l,g,U,a,b	4
253	$[E(4)^3{:}3^2{:}2]3$	$3456=2^7 3^3$	$-$	268	292	$3/2\ 4/5^2$	$l,g,\mathcal{X},\mathcal{N},a$	4
254	$[\frac{1}{3}A(4)^3]S(3)_6$	$3456=2^7 3^3$	$-$	254	294	$3/2\ 8/42$	$l,g,U,(0,4)(1,6)(3,7)(8,11)(9,10),\mathfrak{d}$	4
255	$[2^6]L(6)$ $= 2 \wr L(6)$	$3840=2^8 3{\cdot}5$	$-$	270	293	$10/23$	$x,E,\mathcal{D}$	2
256	$\frac{1}{2}[2^6]L(6){:}2$	$3840=2^8 3{\cdot}5$	$-$	270	293	$10/25$	c,E,xO	2
257	$[2^5]L(6){:}2$	$3840=2^8 3{\cdot}5$	$+$	270	293	$10/24$	c,E,O	2
258	$[3^4{:}2]S(4)$	$3888=2^4 3^5$	$-$	258	289	$2/1\ 9/24$	d,b,e,B	3
259	$[3^4{:}2]S(4)_8$	$3888=2^4 3^5$	$+$	259	289	$2/1\ 9/24$	$d,b,o,(0,3)(4,7)(6,10)(8,11)$	3
260	$[2S_4^2]2 = 2S_4 \wr 2$	$4608=2^9 3^2$	$-$	260	260	$4/3\ 6/11$	$\mathcal{R},r,n,f$	6,2a
261	$[S(3)^4]E(4)$ $= S(3) \wr E(4)$	$5184=2^6 3^4$	$-$	289	261	$2/1\ 3/2^3$	d,W,i,h	6b,6,6a,3
262	$\frac{1}{2}[S(3)^4]dD(4)$	$5184=2^6 3^4$	$-$	274	274	$2/1\ 3/2\ 6/13$	$d,n,\mathcal{O},k,\mathfrak{e}$	6,3
263	$\frac{1}{2}[S(3)^4]cD(4)$	$5184=2^6 3^4$	$-$	274	274	$2/1\ 3/2\ 6/13$	$d,n,e,\mathcal{F}$	6,3
264	$[S(3)^4]4 = S(3) \wr 4$	$5184=2^6 3^4$	$-$	274	264	$2/1\ 3/2^3$	d,W,e	6,3
265	$[A(4)^3]3$ $= A(4) \wr 3$	$5184=2^6 3^4$	$+$	283	292	$3/1\ 4/4^2$	G,H,a	4
266	$\frac{1}{2}[S(3)^4]eD(4)$	$5184=2^6 3^4$	$+$	274	274	$2/1\ 3/2\ 6/13$	$d,n,i,h,\mathcal{F}$	6,3
267	$[3^4{:}2^3]D(4)$	$5184=2^6 3^4$	$-$	274	274	$2/1\ 3/2\ 6/13$	d,V,e,k	6,3
268	$[E(4)^3{:}3^2{:}2]S(3)$	$6912=2^8 3^3$	$-$	268	294	$3/2\ 8/45$	$l,g,\mathcal{X},\mathcal{N},a,b$	4
269	$[L(6)^2]2$ $= L(6) \wr 2$	$7200=2^5 3^2 5^2$	$+$	279	299	$5/2\ 6/12$	$\mathcal{C},(0,10)(2,8),f$	6

Nr	Name	|G|	p	N	C	S	Generators	Blocks
270	$[2^6]L(6){:}2$	$7680=2^9 3{\cdot}5$	−	270	293	$^{10}/_{29}$	x,E,O	2
	$= 2 \wr L(6){:}2$							
271	$[3^4{:}2^3]A(4)$	$7776=2^5 3^5$	+	289	289	$^{2}/_{1}\,^{9}/_{28}$	d,V,q,o	3
272	$M_{11}(12)$	$7920=2^4 3^2 5{\cdot}11$	+	272	301	$^{11}/_{5}$	$(0,1,7,3,10,5,9,6)(2,11,8,4)$, $(0,10,4,5,11,8,2,7)(1,6,3,9)$	
273	$[\frac{1}{4}S(4)^3]3$	$10368=2^7 3^4$	−	283	292	$^{3}/_{2}\,^{4}/_{5}{}^{2}$	G,H,$\mathfrak{A}$,a	4
274	$[S(3)^4]D(4)$	$10368=2^7 3^4$	−	274	274	$^{2}/_{1}\,^{3}/_{2}\,^{6}/_{13}$	d,W,e,k	6,3
	$= S(3) \wr D(4)$							
275	$[A(4)^3]S(3)$	$10368=2^7 3^4$	+	283	294	$^{3}/_{1}\,^{8}/_{42}$	G,H,a,b	4
	$= A(4) \wr S(3)$							
276	$\frac{1}{2}[\frac{1}{4}S(4)^3]S(3)$	$10368=2^7 3^4$	−	283	294	$^{3}/_{2}\,^{8}/_{42}$	G,H,a,$\mathfrak{A}$b	4
277	$[2^5]A(6)$	$11520=2^8 3^2 5$	+	293	293	$^{10}/_{34}$	c,S,F	2
278	$\frac{1}{2}[(L(6){:}2)^2]2$	$14400=2^6 3^2 5^2$	−	288	299	$^{5}/_{3}\,^{6}/_{14}$	$\mathcal{C}$,O,B/$\mathfrak{s}$	6
279	$[\frac{1}{2}(L(6){:}2)^2]2$	$14400=2^6 3^2 5^2$	+	288	299	$^{5}/_{3}\,^{6}/_{14}$	$\mathcal{C}$,O,f	6
280	$[S(3)^4]A(4)$	$15552=2^6 3^5$	−	289	289	$^{2}/_{1}\,^{9}/_{28}$	d,W,q,o	3
	$= S(3) \wr A(4)$							
281	$[3^4{:}2^3]S(4)$	$15552=2^6 3^5$	−	289	289	$^{2}/_{1}\,^{9}/_{31}$	d,V,e,$\mathcal{N}$	3
282	$\frac{1}{2}[S(3)^4]S(4)$	$15552=2^6 3^5$	+	289	289	$^{2}/_{1}\,^{9}/_{31}$	d,n,q,o,$\mathcal{F}$	3
283	$[\frac{1}{4}S(4)^3]S(3)$	$20736=2^8 3^4$	−	283	294	$^{3}/_{2}\,^{8}/_{45}$	G,H,$\mathfrak{A}$,a,b	4
284	$[\frac{1}{2}S(4)^3]3$	$20736=2^8 3^4$	+	294	292	$^{3}/_{2}\,^{4}/_{5}{}^{2}$	G,H,$\mathfrak{B}$,a	4
285	$[2^5]S(6)$	$23040=2^9 3^2 5$	+	293	293	$^{10}/_{37}$	c,R,p	2
286	$[2^6]A(6)$	$23040=2^9 3^2 5$	−	293	293	$^{10}/_{36}$	x,S,F	2
	$= 2 \wr A(6)$							
287	$\frac{1}{2}[2^6]S(6)$	$23040=2^9 3^2 5$	−	293	293	$^{10}/_{38}$	c,S,F,xR	2
288	$[(L(6){:}2)^2]2$	$28800=2^7 3^2 5^2$	−	288	299	$^{5}/_{3}\,^{6}/_{14}$	$\mathcal{C}$,$\mathfrak{k}\mathcal{O}$,f	6
	$= L(6){:}2 \wr 2$							

Nr	Name	|G|	p	N	C	S	Generators	Blocks
289	$[S(3)^4]S(4)$ $= S(3) \wr S(4)$	$31104=2^7 3^5$	$-$	289	289	$2/1\ 9/31$	d, W, e, B	3
290	$[\frac{1}{2}S(4)^3]S(3)$	$41472=2^9 3^4$	$+$	294	294	$3/2\ 8/47$	$G, H, \mathfrak{B}, a, b$	4
291	$\frac{1}{2}[S(4)^3]S(3)$	$41472=2^9 3^4$	$-$	294	294	$3/2\ 8/47$	$G, H, \mathfrak{B}C, a, \mathcal{M}$	4
292	$[S(4)^3]3$ $= S(4) \wr 3$	$41472=2^9 3^4$	$-$	294	292	$3/2\ 4/5^2$	$y, \mathfrak{H}, a$	4
293	$[2^6]S(6)$ $= 2 \wr S(6)$	$46080=2^{10} 3^2 5$	$-$	293	293	$10/39$	x, R, p	2
294	$[S(4)^3]S(3)$ $= S(4) \wr S(3)$	$82944=2^{10} 3^4$	$-$	294	294	$3/2\ 8/47$	$y, \mathfrak{H}, a, b$	4
295	$M(12)$	$95040=2^6 3^3 5 \cdot 11$	$+$	295	301	$11/6$	$(0,6,7,5,8)(1,11,2,3,4)$, $(0,11,8,2,4,1,9,5)(6,10)$	
296	$[A(6)^2]2$ $= A(6) \wr 2$	$259200=2^7 3^4 5^2$	$+$	297	299	$5/4\ 6/15$	$\mathcal{P}, \mathcal{Q}, f$	6
297	$[\frac{1}{2}S(6)^2]2$	$518400=2^8 3^4 5^2$	$+$	299	299	$5/5\ 6/16$	$\mathcal{Q}, \mathcal{P}, R, f$	6
298	$\frac{1}{2}[S(6)^2]2$	$518400=2^8 3^4 5^2$	$-$	299	299	$5/5\ 6/16$	$\mathcal{P}, \mathcal{Q}, R, jf$	6
299	$[S(6)^2]2$ $= S(6) \wr 2$	$1036800=2^9 3^4 5^2$	$-$	299	299	$5/5\ 6/16$	j, Iw, f	6
300	A_{12}	$239500800=\frac{12!}{2}$	$+$	301	301	$11/7$	xj, $(0,2,3)$, $(0,3,4)$, $(0,4,5)$, $(0,5,6)$, $(0,6,7)$, $(0,7,8)$, $(0,8,9)$, $(0,9,10)$, $(0,10,11)$	
301	S_{12}	$479001600=12!$	$-$	301	301	$11/8$	$x, j, \mathfrak{H}l, Wd$, $(0,5)$, $\mathcal{R}$, $(0,7)$, $dW, G^{-1}y$, $(0,10)$, $(0,11)$	

Degree 13:

Generator: $a = (0,1,2,3,4,5,6,7,8,9,10,11,12)$

Nr	Name	|G|	p	N	C	S	Generators
1	$C(13) = 13$	13=13	+	6	1		a
2	$D(13)$ $= 13{:}2$	26=2·13	+	6	2	$2/1^6$	a, $(1,12)(2,11)(3,10)(4,9)(5,8)(6,7)$
3	$F_{39}(13)$ $= 13{:}3$	39=3·13	+	6	3	$3/1^4$	a, $(1,3,9)(2,6,5)(4,12,10)(7,8,11)$
4	$F_{52}(13)$ $= 13{:}4$	$52=2^2 13$	−	6	4	$4/1^3$	a, $(1,5,12,8)(2,10,11,3)(4,7,9,6)$
5	$F_{78}(13)$ $= 13{:}6$	78=2·3·13	+	6	5	$6/1^2$	a, $(1,4,3,12,9,10)(2,8,6,11,5,7)$
6	$F_{156}(13)$ $= 13{:}12$	$156=2^2 3\cdot 13$	−	6	9	$12/1$	a, $(1,2,4,8,3,6,12,11,9,5,10,7)$
7	$L(13)$ $= PSL(3,3)$	$5616=2^4 3^3 13$	+	7	9	$12/157$	a, $(2,12)(4,11)(5,6)(7,10)$
8	A_{13}	$3113510400=\frac{13!}{2}$	+	9	9	$12/300$	$(0,1,2)$, $(0,2,3)$, $(0,3,4)$, $(0,4,5)$, $(0,5,6)$, $(0,6,7)$, $(0,7,8)$, $(0,8,9)$, $(0,9,10)$, $(0,10,11)$, $(0,11,12)$
9	S_{13}	6227020800=13!	−	9	9	$12/301$	$(0,1)$, $(0,2)$, $(0,3)$, $(0,4)$, $(0,5)$, $(0,6)$, $(0,7)$, $(0,8)$, $(0,9)$, $(0,10)$, $(0,11)$, $(0,12)$

Degree 14:

Generators:

$$a = (0,2,4,6,8,10,12)(1,3,5,7,9,11,13) \qquad g = (0,7)$$
$$b = (1,9,11)(2,4,8)(3,13,5)(6,12,10) \qquad h = (3,13,5)(6,12,10)$$
$$c = (0,7)(1,8)(2,9)(3,10)(4,11)(5,12)(6,13) \qquad i = (2,4)(5,13)(6,12)(9,11)$$
$$d = (0,2,4,6,8,10,12) \qquad j = (2,4,8)(6,12,10)$$
$$e = (1,13)(2,12)(3,11)(4,10)(5,9)(6,8) \qquad k = (1,11,9)(2,4,8)(3,5,13)(6,12,10)$$
$$f = (0,7)(2,9) \qquad l = (1,8)(2,9)(4,11)$$

$m = (0,7)(1,6,13,8)(2,9,12,5)(3,4,11,10)$

$n = (2,12)(4,10)(6,8)$

$o = (0,7)(3,10)(5,12)(6,13)$

$p = (3,5)(10,12)$

$q = (8,12,10)$

$r = (0,7)(1,13)(2,12)(3,11)(4,10)(5,9)(6,8)$

$s = (0,13)(1,12)(2,6)(3,4)(7,11)(9,10)$

$t = (1,8)(2,13)(3,10)(4,12)(5,11)(6,9)$

$u = (1,8)(2,11)(3,10)(4,9)(5,6)(12,13)$

$v = (0,1,2,3,4,5,6,7,8,9,10,11,12)$

$w = (0,1,2,3,4,5,6,7,8,9,10,11,12,13)$

$x = (0,2)(7,9)$

Blocks:

$2 = [0,7]$

$7 = [0,2,4,6,8,10,12]$

Nr	Name	|G|	p	N	C	S	Generators	Blocks
1	C(14) = 7[×]2	14=2·7	–	7	1		w	7,2
2	$D_{14}(14)$ = [7]2	14=2·7	–	24	2		a,we	[0,13],7,[0,11],[0,9], 2,[0,5],[0,3],[0,1]
3	D(7)[×]2	$28=2^2 7$	–	7	3	$2/1^6$	w,e	7,2
4	$2[\frac{1}{2}]F_{42}(7)$	42=2·3·7	–	7	4	$3/1^4$	a,b,ec	7,2
5	$F_{21}(7)$[×]2	42=2·3·7	–	7	5	$3/1^4$	a,b,c	7,2
6	$[2^3]7$	$56=2^3 7$	+	18	29	$2/1^6$	o,a	2
7	$F_{42}(7)$[×]2	$84=2^2 3\cdot 7$	–	7	49	$6/1^2$	a,b,e,c	7,2
8	$[7^2]2$ = 7 ≀ 2	$98=2\cdot 7^2$	–	24	8	$7/1$	d,c	7
9	$[2^4]7$	$112=2^4 7$	–	18	29	$2/1^6$	l,a	2
10	$L_7(14)$	$168=2^3 3\cdot 7$	+	17	57	$12/4$	a,b,t	2
11	$[2^3]F_{21}(7)$	$168=2^3 3\cdot 7$	+	18	44	$6/4^2$	o,a,b	2
12	$\frac{1}{2}[D(7)^2]2$	$196=2^2 7^2$	+	32	20	$2/1^3\ 7/2$	d,e,m	7
13	$[\frac{1}{2}D(7)^2]2$	$196=2^2 7^2$	–	32	20	$2/1^3\ 7/2$	d,e,c	7
14	$[7^2{:}3]2$	$294=2\cdot 3\cdot 7^2$	–	24	26	$3/1^2\ 7/3$	d,b,c	7

Nr	Name	$\lvert G\rvert$	p	N	C	S	Generators	Blocks
15	$[7^2{:}3_3]2$	$294=2{\cdot}3{\cdot}7^2$	−	37	26	$3/1^2\,7/3$	d,k,c	7
16	$L_7{:}2(14)$ $=[L(7)_{\div}]2$	$336=2^4 3{\cdot}7$	−	16	16	$3/2\,4/5\,6/7$	$(0,2,4,6,8,10,12)(1,13,11,9,7,5,3)$, b,i,c	7
17	$2L_7(14)$ $=[2]L(7)$	$336=2^4 3{\cdot}7$	−	17	57	$12/8$	a,b,t,c	2
18	$[2^4]F_{21}(7)$	$336=2^4 3{\cdot}7$	−	18	44	$6/4\,6/6$	l,a,b	2
19	$L(7)[\times]2$	$336=2^4 3{\cdot}7$	−	19	49	$6/7^2$	a,b,i,c	7,2
20	$[D(7)^2]2$ $=D(7)\wr 2$	$392=2^3 7^2$	−	32	20	$2/1^3\,7/2$	d,n,c	7
21	$[2^6]7$	$448=2^6 7$	+	48	29	$2/1^6$	f,a	2
22	$[\frac{1}{6}{}_-.F_{42}(7)^2]2_2$	$588=2^2 3{\cdot}7^2$	+	45	61	$6/1\,7/4$	d,k,e,m	7
23	$[\frac{1}{6}{}_+.F_{42}(7)^2]2_2$	$588=2^2 3{\cdot}7^2$	+	32	61	$6/1\,7/4$	d,b,e,m	7
24	$[7^2{:}6]2$	$588=2^2 3{\cdot}7^2$	−	32	61	$6/1\,7/4$	d,b,e,c	7
25	$[7^2{:}6_3]2$	$588=2^2 3{\cdot}7^2$	−	45	61	$6/1\,7/4$	d,k,e,c	7
26	$\frac{1}{2}[\frac{1}{2}F_{42}(7)^2]2$	$882=2{\cdot}3^2 7^2$	−	37	26	$3/1^2\,7/3$	d,j, $(0,7)(1,8)(2,5)(3,4)(6,13)(9,12)(10,11)$	7
27	$2^7[\frac{1}{2}]D(7)$	$896=2^7 7$	−	48	38	$4/3^3$	f,a,r	2
28	$[2^6]D(7)$	$896=2^7 7$	+	48	38	$4/3^3$	f,a,e	2
29	$[2^7]7=2\wr 7$	$896=2^7 7$	−	48	29	$2/1^6$	g,a	2
30	$L(14)$ $=PSL(2,13)$	$1092=2^2 3{\cdot}7{\cdot}13$	+	39	63	$13/5$	v, $(1,4,3,12,9,10)(2,8,6,11,5,7)$, s	
31	$[D(7)^2{:}3_3]2$	$1176=2^3 3{\cdot}7^2$	−	45	61	$6/1\,7/4$	d,n,k,c	7
32	$[D(7)^2{:}3]2$	$1176=2^3 3{\cdot}7^2$	−	32	61	$6/1\,7/4$	d,n,b,c	7
33	$2^3{\cdot}L_7(14)$	$1344=2^6 3{\cdot}7$	+	42	57	$12/63$	o,a,b,u	2
34	$2^3{:}L_7(14)$ $=[2^3]L(7)$ $=[2^3]L(3,2)$	$1344=2^6 3{\cdot}7$	+	43	57	$12/67$	o,a,b,i	2

Nr	Name	$\lvert G\rvert$	p	N	C	S	Generators	Blocks
35	$[2^6]F_{21}(7)$	$1344=2^6 3\cdot 7$	+	48	44	$6/6^2$	f,a,b	2
36	$\frac{1}{2}[F_{42}(7)^2]2$	$1764=2^2 3^2 7^2$	+	45	61	$6/17/4$	d,j,e,m	7
37	$[\frac{1}{2}F_{42}(7)^2]2$	$1764=2^2 3^2 7^2$	−	45	61	$6/17/4$	d,j,e,c	7
38	$[2^7]D(7)$ $= 2 \wr D(7)$	$1792=2^8 7$	−	48	38	$4/3^3$	g,a,e	2
39	$L(14){:}2$ $= PGL(2,13)$	$2184=2^3 3\cdot 7\cdot 13$	−	39	63	$13/6$	v, $(1,2,4,8,3,6,12,11,9,5,10,7)$, s	
40	$\frac{1}{2}[2^7]F_{42}(7)$	$2688=2^7 3\cdot 7$	−	48	57	$12/105$	f,a,b,r	2
41	$[2^6]F_{42}(7)$	$2688=2^7 3\cdot 7$	+	48	57	$12/87$	f,a,b,e	2
42	$2^4\cdot L_7(14)$	$2688=2^7 3\cdot 7$	−	42	57	$12/115$	l,a,b,u	2
43	$2^4{:}L_7(14)$ $= [2^4]L(7)$	$2688=2^7 3\cdot 7$	−	43	57	$12/110$	l,a,b,i	2
44	$[2^7]F_{21}(7)$ $= 2 \wr F_{21}(7)$	$2688=2^7 3\cdot 7$	−	48	44	$6/6^2$	g,a,b	2
45	$[F_{42}(7)^2]2$ $= F_{42}(7) \wr 2$	$3528=2^3 3^2 7^2$	−	45	61	$6/17/4$	d,j,n,c	7
46	$2[\frac{1}{2}]S(7)$	$5040=2^4 3^2 5\cdot 7$	−	49	49	$6/15^2$	a,h,xc	7,2
47	$2[\times]A(7)$	$5040=2^4 3^2 5\cdot 7$	−	49	49	$6/15^2$	a,h,c	7,2
48	$[2^7]F_{42}(7)$ $= 2 \wr F_{42}(7)$	$5376=2^8 3\cdot 7$	−	48	57	$12/134$	g,a,b,e	2
49	$2[\times]S(7)$	$10080=2^5 3^2 5\cdot 7$	−	49	49	$6/16^2$	a,p,c	7,2
50	$[2^6]L(7)$	$10752=2^9 3\cdot 7$	+	51	57	$12/184$	f,a,b,i	2
51	$[2^7]L(7)$ $= 2 \wr L(7)$	$21504=2^{10} 3\cdot 7$	−	51	57	$12/227$	g,a,b,i	2
52	$[L(7)^2]2$ $= L(7) \wr 2$	$56448=2^7 3^2 7^2$	−	52	61	$6/77/5$	d,j, $(2,4)(6,12)$, c	7
53	$[2^6]A(7)$	$161280=2^9 3^2 5\cdot 7$	+	57	57	$12/277$	f,a,h	2

Nr	Name	|G|	p	N	C	S	Generators	Blocks
54	$\frac{1}{2}[2^7]S(7)$	$322560=2^{10}3^2 5\cdot 7$	−	57	57	$12/287$	f,a,h,pg	2
55	$[2^6]S(7)$	$322560=2^{10}3^2 5\cdot 7$	+	57	57	$12/285$	f,a,h,p	2
56	$[2^7]A(7)$ $= 2 \wr A(7)$	$322560=2^{10}3^2 5\cdot 7$	−	57	57	$12/286$	g,a,h	2
57	$[2^7]S(7)$	$645120=2^{11}3^2 5\cdot 7$	−	57	57	$12/293$	g,a,h,p	2
58	$[A(7)^2]2$ $= A(7) \wr 2$	$12700800=2^7 3^4 5^2 7^2$	−	60	61	$6/15\ 7/6$	d,q,c	7
59	$\frac{1}{2}[S(7)^2]2$	$25401600=2^8 3^4 5^2 7^2$	+	61	61	$6/16\ 7/7$	d,q,x, $(0,7,2,9)(1,8)(3,10)(4,11)(5,12)(6,13)$	7
60	$[\frac{1}{2}S(7)^2]2$	$25401600=2^8 3^4 5^2 7^2$	−	61	61	$6/16\ 7/7$	d,q,x,c	7
61	$[S(7)^2]2$ $= S(7) \wr 2$	$50803200=2^9 3^4 5^2 7^2$	−	61	61	$6/16\ 7/7$	d, $(10,12)$, c	7
62	A_{14}	$43589145600=\frac{14!}{2}$	+	63	63	$13/8$	$(0,1,2)$, $(0,2,3)$, $(0,3,4)$, $(0,4,5)$, $(0,5,6)$, $(0,6,7)$, $(0,7,8)$, $(0,8,9)$, $(0,9,10)$, $(0,10,11)$, $(0,11,12)$, $(0,12,13)$	
63	S_{14}	$87178291200=14!$	−	63	63	$13/9$	$(0,1)$, $(0,2)$, $(0,3)$, $(0,4)$, $(0,5)$, $(0,6)$, g, $(0,8)$, $(0,9)$, $(0,10)$, $(0,11)$, $(0,12)$, $v^{-1}w$	

Degree 15:

Generators:

$a = (0,5,10)(1,6,11)(2,7,12)(3,8,13)(4,9,14)$

$b = (0,3,6,9,12)(1,4,7,10,13)(2,5,8,11,14)$

$c = (0,3,6,9,12)$

$d = (1,11)(2,7)(4,14)(5,10)(8,13)$

$e = (0,5,10)$

$f = (1,4)(2,8)(3,12)(6,9)(7,13)(11,14)$

$g = (1,7,4,13)(2,14,8,11)(3,6,12,9)$

$h = (1,6,11)(4,14,9)$

$i = (0,1,2,3,4,5,6,7,8,9,10,11,12,13,14)$

$j = (1,4)(6,9)(11,14)$

$k = (1,13)(2,14)(3,6)(4,7)(8,11)(9,12)$

$l = (1,13,10,7,4)(2,5,8,11,14)$

$m = (1,11)(4,14)$

$n = (0,7,12,6,2)(1,9,10,3,14)(4,5,11,13,8)$

$o = (3,6)(9,12)$
$p = (1,2,4,8)(3,6,12,9)(5,10)(7,14,13,11)$
$q = (3,12)(6,9)$
$r = (1,14)(2,13)(3,12)(4,11)(5,10)(6,9)(7,8)$
$s = (5,10)$
$t = (1,14)(2,7)(4,11)(5,10)(6,9)(8,13)$
$u = (1,13,4,7)(2,14,8,11)$
$v = (0,6,9)(1,4,10)(2,5,8)(3,7,11)(12,14,13)$

$w = (0,4)(1,5)(2,7)(3,6)(8,9)(12,13)$
$x = (1,4)(2,8)(7,13)(11,14)$
$y = (0,5)(1,4)(2,6)(3,7)(8,9)(12,13)$
$z = (1,4)(11,14)$
$A = (0,1,2)(4,5,6)(8,9,10)(12,13,14)$
$B = (1,7,4,13)(2,14,8,11)$
$C = (3,6,12,9)$

$D = (6,9)$

Blocks:

$3 = [0,5,10]$
$5 = [0,3,6,9,12]$

Nr	Name	|G|	p	N	C	S	Generators	Blocks
1	$C(15) = 5[\times]3$	$15=3\cdot5$	+	11	1		i	5,3
2	$D(15)$	$30=2\cdot3\cdot5$	−	11	2	$2/1^7$	i,r	5,3
3	$D(5)[\times]3$	$30=2\cdot3\cdot5$	+	11	3	$2/1^6$	i,f	5,3
4	$5[\times]S(3)$	$30=2\cdot3\cdot5$	−	11	4	$2/1^5$	i,d	5,3
5	$A_5(15)$	$60=2^2 3\cdot5$	+	21	5	$4/2^3$	n,v	3
6	$F(5)[\frac{1}{2}]S(3)$	$60=2^2 3\cdot5$	+	11	6	$2/1\, 4/1^3$	i,f,p	5,3
7	$D(5)[\times]S(3)$	$60=2^2 3\cdot5$	−	11	7	$2/1^3\, 4/2^2$	i,f,d	5,3
8	$F(5)[\times]3$	$60=2^2 3\cdot5$	−	11	24	$4/1^3$	i,g	5,3
9	$[5^2]3$	$75=3\cdot5^2$	+	49	25	$5/1^2$	l,a	5
10	$S_5(15)$	$120=2^3 3\cdot5$	+	10	10	$2/1\, 4/3\, 8/4$	n,v,y	3
11	$F(5)[\times]S(3)$	$120=2^3 3\cdot5$	−	11	29	$2/1\, 4/1\, 8/2$	i,g,d	5,3
12	$[5^2{:}2]3$	$150=2\cdot3\cdot5^2$	+	27	50	$2/1^2\, 5/2^2$	l,a,f	5
13	$[5^2]S(3)$	$150=2\cdot3\cdot5^2$	−	49	32	$10/2$	l,a,d	5
14	$5^2{:}2[\frac{1}{2}]S(3)$	$150=2\cdot3\cdot5^2$	−	27	60	$2/1^2\, 10/1$	l,a,r	5
15	$3A_5(15) = [3]A(5) = GL(2,4)$	$180=2^2 3^2 5$	+	21	78	$12/4$	n,v,A	3

Nr	Name	|G|	p	N	C	S	Generators	Blocks
16	$A(5)[\times]3$	$180=2^2 3^2 5$	+	29	24	$4/4^3$	i,k	5,3
17	$\frac{1}{2}[5^2{:}4]S(3)$	$300=2^2 3{\cdot}5^2$	+	27	102	$4/1\ 10/4$	l,a,f,p	5
18	$[5^2{:}2]S(3)$	$300=2^2 3{\cdot}5^2$	−	27	60	$2/1^2\ 10/3$	l,a,f,d	5
19	$[5^2{:}4]3$	$300=2^2 3{\cdot}5^2$	−	27	101	$4/1\ 5/3^2$	l,g,a	5
20	$A_6(15)$	$360=2^3 3^2 5$	+	28	28	$6/7\ 8/14$	n,*w*	
21	$3S_5(15)$	$360=2^3 3^2 5$	+	21	93	$2/1\ 12/8$	n,*v*,y,A	3
22	$S(5)[\frac{1}{2}]S(3)$	$360=2^3 3^2 5$	+	29	29	$2/1\ 4/5\ 8/14$	i,t	5,3
23	$A(5)[\times]S(3)$	$360=2^3 3^2 5$	−	29	29	$2/1\ 4/4\ 8/13$	i,k,d	5,3
24	$S(5)[\times]3$	$360=2^3 3^2 5$	−	29	24	$4/5^3$	i,j	5,3
25	$[5^3]3 = 5 \wr 3$	$375=3{\cdot}5^3$	+	49	25	$5/1^2$	c,a	5
26	$[3^4]5$	$405=3^4 5$	+	64	36	$3/1^4$	h,b	3
27	$[5^2{:}4]S(3)$	$600=2^3 3{\cdot}5^2$	−	27	102	$4/1\ 10/5$	l,g,a,d	5
28	$S_6(15)$	$720=2^4 3^2 5$	+	28	28	$6/7\ 8/24$	n,*w*,y	
29	$S(5)[\times]S(3)$	$720=2^4 3^2 5$	−	29	29	$2/1\ 4/5\ 8/24$	i,j,d	5,3
30	$[5^3{:}2]3$	$750=2{\cdot}3{\cdot}5^3$	+	49	50	$2/1^2\ 5/2^2$	c,f,a	5
31	$\frac{1}{2}[5^3{:}2]S(3)$	$750=2{\cdot}3{\cdot}5^3$	−	49	60	$2/1^2\ 10/6$	c,a,r	5
32	$[5^3]S(3)$	$750=2{\cdot}3{\cdot}5^3$	−	49	32	$10/6$	c,a,d	5
33	$[3^4{:}2]5$	$810=2{\cdot}3^4 5$	−	52	81	$2/1\ 3/2^4$	h,b,d	3
34	$[3^4]D(5)$	$810=2{\cdot}3^4 5$	+	64	46	$6/5^2$	h,b,f	3
35	$\frac{1}{2}[3^4{:}2]D(5)$	$810=2{\cdot}3^4 5$	−	52	86	$2/1\ 6/5^2$	h,b,r	3
36	$[3^5]5 = 3 \wr 5$	$1215=3^5 5$	+	64	36	$3/1^4$	e,b	3
37	$\frac{1}{2}[5^3{:}4]S(3)$	$1500=2^2 3{\cdot}5^3$	+	49	102	$4/1\ 10/10$	c,f,a,p	5
38	$[5^3{:}4]3$	$1500=2^2 3{\cdot}5^3$	−	49	101	$4/1\ 5/3^2$	c,g,a	5
39	$[\frac{1}{2}D(5)^3]3$	$1500=2^2 3{\cdot}5^3$	+	68	50	$2/1^2\ 5/2^2$	c,x,a	5

Nr	Name	|G|	p	N	C	S	Generators	Blocks
40	$[5^3{:}2]S(3)$	$1500=2^2 3{\cdot}5^3$	−	49	60	$2/1^2\ 10/9$	c,f,a,d	5
41	$[3^4]F(5)$	$1620=2^2 3^4 5$	−	64	78	$12/72$	h,b,g	3
42	$\frac{1}{2}[3^4{:}2]F(5)$	$1620=2^2 3^4 5$	+	52	93	$2/1\ 12/73$	h,b,p	3
43	$[3^4{:}2]D(5)$	$1620=2^2 3^4 5$	−	52	86	$2/1\ 6/9^2$	h,b,d,f	3
44	$[3^5{:}2]5$	$2430=2{\cdot}3^5 5$	−	64	81	$2/1\ 3/2^4$	e,d,b	3
45	$\frac{1}{2}[3^5{:}2]D(5)$	$2430=2{\cdot}3^5 5$	−	64	86	$2/1\ 6/5^2$	e,b,r	3
46	$[3^5]D(5) = 3 \wr D(5)$	$2430=2{\cdot}3^5 5$	+	64	46	$6/5^2$	e,b,f	3
47	$A_7(15)$	$2520=2^3 3^2 5{\cdot}7$	+	47	104	$14/10$	n, $(1,2,3)(5,6,7)(8,10,9)(12,14,13)$	
48	$\frac{1}{2}[D(5)^3]S(3)$	$3000=2^3 3{\cdot}5^3$	−	68	60	$2/1^2\ 10/21$	c,x,a,q d	5
49	$[5^3{:}4]S(3)$	$3000=2^3 3{\cdot}5^3$	−	49	102	$4/1\ 10/17$	c,g,a,d	5
50	$[D(5)^3]3 = D(5) \wr 3$	$3000=2^3 3{\cdot}5^3$	+	68	50	$2/1^2\ 5/2^2$	c,q,a	5
51	$[\frac{1}{2}D(5)^3]S(3)$	$3000=2^3 3{\cdot}5^3$	−	68	60	$2/1^2\ 10/21$	c,x,a,d	5
52	$[3^4{:}2]F(5)$	$3240=2^3 3^4 5$	−	52	93	$2/1\ 12/119$	h,d,b,g	3
53	$[3^4]A(5)$	$4860=2^2 3^5 5$	+	83	78	$12/133$	h,b,k	3
54	$\frac{1}{2}[3^5{:}2]F(5)$	$4860=2^2 3^5 5$	+	64	93	$2/1\ 12/131$	e,b,p	3
55	$[3^5{:}2]D(5)$	$4860=2^2 3^5 5$	−	64	86	$2/1\ 6/9^2$	e,d,b,f	3
56	$[3^5]F(5) = 3 \wr F(5)$	$4860=2^2 3^5 5$	−	64	78	$12/131$	e,b,g	3
57	$[\frac{1}{4}F(5)^3]3$	$6000=2^4 3{\cdot}5^3$	+	82	101	$4/1\ 5/3^2$	c,u,a	5
58	$\frac{1}{2}[D(5)^3{:}2]S(3)$	$6000=2^4 3{\cdot}5^3$	+	68	102	$4/1\ 10/21$	c,q,a,p	5
59	$[D(5)^3{:}2]3$	$6000=2^4 3{\cdot}5^3$	−	68	101	$4/1\ 5/3^2$	c,q,a,g	5
60	$[D(5)^3]S(3)$ $= D(5) \wr S(3)$	$6000=2^4 3{\cdot}5^3$	−	68	60	$2/1^2\ 10/21$	c,q,a,d	5
61	$[3^4{:}2]A(5)$	$9720=2^3 3^5 5$	−	70	93	$2/1\ 12/176$	h,d,b,k	3
62	$\frac{1}{2}[3^4{:}2]S(5)$	$9720=2^3 3^5 5$	+	70	93	$2/1\ 12/178$	h,b,t	3
63	$[3^4]S(5)$	$9720=2^3 3^5 5$	−	83	78	$12/175$	h,b,j	3

Nr	Name	|G|	p	N	C	S	Generators	Blocks
64	$[3^5{:}2]F(5)$	$9720=2^3 3^5 5$	−	64	93	$^2/_1\, ^{12}/_{170}$	e,d,b,g	3
65	$\frac{1}{2}[\frac{1}{2}F(5)^3]S(3)$	$12000=2^5 3{\cdot}5^3$	−	82	102	$^4/_1\, ^{10}/_{33}$	c,u,a,r	5
66	$[\frac{1}{4}F(5)^3]S(3)$	$12000=2^5 3{\cdot}5^3$	−	82	102	$^4/_1\, ^{10}/_{33}$	c,u,a,d	5
67	$[\frac{1}{2}F(5)^3]3$	$12000=2^5 3{\cdot}5^3$	+	82	101	$^4/_1\, ^5/_3{}^2$	c,u,f,a	5
68	$[D(5)^3{:}2]S(3)$	$12000=2^5 3{\cdot}5^3$	−	68	102	$^4/_1\, ^{10}/_{27}$	c,q,g,a,d	5
69	$[3^5]A(5) = 3 \wr A(5)$	$14580=2^2 3^6 5$	+	83	78	$^{12}/_{194}$	e,b,k	3
70	$[3^4{:}2]S(5)$	$19440=2^4 3^5 5$	−	70	93	$^2/_1\, ^{12}/_{213}$	h,d,b,j	3
71	$[\frac{1}{2}S(3)^5]5$	$19440=2^4 3^5 5$	+	87	81	$^2/_1\, ^3/_2{}^4$	e,m,b	3
72	$L(15) = A_8(15)$ $= PSL(4,2)$	$20160=2^6 3^2 5{\cdot}7$	+	72	104	$^{14}/_{34}$	n,A,w	
73	$\frac{1}{2}[F(5)^3]S(3)$	$24000=2^6 3{\cdot}5^3$	+	82	102	$^4/_1\, ^{10}/_{33}$	c,q,B,a,Cd	5
74	$[\frac{1}{2}F(5)^3]S(3)$	$24000=2^6 3{\cdot}5^3$	−	82	102	$^4/_1\, ^{10}/_{33}$	c,q,B,a,d	5
75	$[F(5)^3]3 = F(5) \wr 3$	$24000=2^6 3{\cdot}5^3$	−	82	101	$^4/_1\, ^5/_3{}^2$	c,C,a	5
76	$[3^5{:}2]A(5)$	$29160=2^3 3^6 5$	−	83	93	$^2/_1\, ^{12}/_{234}$	e,d,b,k	3
77	$\frac{1}{2}[3^5{:}2]S(5)$	$29160=2^3 3^6 5$	+	83	93	$^2/_1\, ^{12}/_{233}$	e,b,t	3
78	$[3^5]S(5) = 3 \wr S(5)$	$29160=2^3 3^6 5$	−	83	78	$^{12}/_{231}$	e,b,j	3
79	$\frac{1}{2}[S(3)^5]D(5)$	$38880=2^5 3^5 5$	−	87	86	$^2/_1\, ^6/_{13}{}^2$	e,m,b,sf	3
80	$[\frac{1}{2}S(3)^5]D(5)$	$38880=2^5 3^5 5$	+	87	86	$^2/_1\, ^6/_{13}{}^2$	e,m,b,f	3
81	$[S(3)^5]5 = S(3) \wr 5$	$38880=2^5 3^5 5$	−	87	81	$^2/_1\, ^3/_2{}^4$	e,s,b	3
82	$[F(5)^3]S(3)$ $= F(5) \wr S(3)$	$48000=2^7 3{\cdot}5^3$	−	82	102	$^4/_1\, ^{10}/_{33}$	c,C,a,d	5
83	$[3^5{:}2]S(5)$	$58320=2^4 3^6 5$	−	83	93	$^2/_1\, ^{12}/_{258}$	e,d,b,j	3
84	$\frac{1}{2}[S(3)^5]F(5)$	$77760=2^6 3^5 5$	+	87	93	$^2/_1\, ^{12}/_{264}$	e,m,b,f,p	3
85	$[\frac{1}{2}S(3)^5]F(5)$	$77760=2^6 3^5 5$	−	87	93	$^2/_1\, ^{12}/_{264}$	e,m,b,g	3
86	$[S(3)^5]D(5)$ $= S(3) \wr D(5)$	$77760=2^6 3^5 5$	−	87	86	$^2/_1\, ^6/_{13}{}^2$	e,s,b,f	3

Nr	Name	$\lvert G\rvert$	p	N	C	S	Generators	Blocks
87	$[S(3)^5]F(5)$ $= S(3) \wr F(5)$	$155520=2^7 3^5 5$	$-$	87	93	$2/_1\, 12/_{264}$	e,s,b,g	3
88	$[\frac{1}{2}S(3)^5]A(5)$	$233280=2^6 3^6 5$	$+$	93	93	$2/_1\, 12/_{280}$	e,m,b,k	3
89	$\frac{1}{2}[S(3)^5]S(5)$	$466560=2^7 3^6 5$	$+$	93	93	$2/_1\, 12/_{289}$	e,m,b,sj	3
90	$[S(3)^5]A(5)$ $= S(3) \wr A(5)$	$466560=2^7 3^6 5$	$-$	93	93	$2/_1\, 12/_{280}$	e,s,b,k	3
91	$[\frac{1}{2}S(3)^5]S(5)$	$466560=2^7 3^6 5$	$-$	93	93	$2/_1\, 12/_{289}$	e,m,b,j	3
92	$[A(5)^3]3$ $= A(5) \wr 3$	$648000=2^6 3^4 5^3$	$+$	97	101	$4/_4\, 5/_4{}^2$	c,o,a	5
93	$[S(3)^5]S(5)$ $= S(3) \wr S(5)$	$933120=2^8 3^6 5$	$-$	93	93	$2/_1\, 12/_{289}$	e,s,b,j	3
94	$\frac{1}{2}[A(5)^3{:}2]S(3)$	$1296000=2^7 3^4 5^3$	$+$	97	102	$4/_5\, 10/_{40}$	c,o,a,t	5
95	$[A(5)^3{:}2]3$	$1296000=2^7 3^4 5^3$	$-$	97	101	$4/_5\, 5/_5{}^2$	c,o,j,a	5
96	$[A(5)^3]S(3)$ $= A(5) \wr S(3)$	$1296000=2^7 3^4 5^3$	$-$	97	102	$4/_4\, 10/_{40}$	c,o,a,d	5
97	$[A(5)^3{:}2]S(3)$	$2592000=2^8 3^4 5^3$	$-$	97	102	$4/_5\, 10/_{41}$	c,o,j,a,d	5
98	$[\frac{1}{2}S(5)^3]3$	$2592000=2^8 3^4 5^3$	$+$	102	101	$4/_5\, 5/_5{}^2$	c,o,z,a	5
99	$\frac{1}{2}[S(5)^3]S(3)$	$5184000=2^9 3^4 5^3$	$+$	102	102	$4/_5\, 10/_{43}$	c,o,z,a,Dd	5
100	$[\frac{1}{2}S(5)^3]S(3)$	$5184000=2^9 3^4 5^3$	$-$	102	102	$4/_5\, 10/_{43}$	c,o,z,a,d	5
101	$[S(5)^3]3$ $= S(5) \wr 3$	$5184000=2^9 3^4 5^3$	$-$	102	101	$4/_5\, 5/_5{}^2$	c,D,a	5
102	$[S(5)^3]S(3)$ $= S(5) \wr S(3)$	$10368000=2^{10} 3^4 5^3$	$-$	102	102	$4/_5\, 10/_{43}$	c,D,a,d	5
103	A_{15}	$653837184000=\frac{15!}{2}$	$+$	104	104	$14/_{62}$	$(0,1,2), (0,2,3), (0,3,4), (0,4,5), (0,5,6), (0,6,7), (0,7,8), (0,8,9), (0,9,10), (0,10,11), (0,11,12), (0,12,13), (0,13,14)$	
104	S_{15}	$1307674368000=15!$	$-$	104	104	$14/_{63}$	$(0,1), (0,2), (0,3), (0,4), se, (0,6), (0,7), (0,8), (0,9), es, (0,11), (0,12), (0,13), (0,14)$	

Appendix A.2 Isomorphism classes

Degree 3:

2	6/2

Degree 4:

3	8/4
4	6/4,12/4
5	6/7,6/8,8/14, 12/8,12/9

Degree 5:

2	10/2
3	10/4
4	6/12,10/7,12/33,15/5
5	6/14,10/12,10/13, 12/74,15/10

Degree 6:

2	3/2
3	12/3
4	4/4,12/4
4	12/4
5	9/4
6	8/13,12/6,12/7
7	4/5,6/8,8/14, 12/8,12/9
8	——
9	9/8,12/16
10	9/9,12/17
11	8/24,12/21,12/22, 12/23,12/24
12	5/4,10/7,12/33,15/5
13	9/16,12/34,12/35, 12/36
14	5/5,10/12,10/13, 12/74,15/10
15	10/26,15/20
16	10/32,12/183,15/28

Degree 7:

2	14/2
4	14/4
5	8/37,14/10
6	15/47
7	14/46

Degree 8:

4	4/3
13	6/6,12/6,12/7
14	4/5,6/7,6/8, 12/8,12/9
24	6/11,12/21,12/22, 12/23,12/24
37	7/5,14/10
41	12/108,12/109, 12/110,12/111
42	12/126,12/128,12/129
43	14/16
45	12/161,12/163,12/165
46	12/160,12/162
47	12/200,12/201, 12/202,12/203
48	14/34
49	15/72

Degree 9:

4	6/5
8	6/9,12/16
9	6/10,12/17
16	6/13,12/34,12/35, 12/36
23	12/122
25	12/132,12/133
26	12/157
28	12/176
29	12/175
30	12/177,12/178
31	12/213

Degree 10:

2	5/2
4	5/3
7	5/4,6/12,12/33, 15/5
11	12/75,12/76
12	5/5,6/14,10/13, 12/74,15/10
13	——
15	10/16
16	——
19	10/21
21	——
22	12/123
24	10/25
25	——
26	6/15,15/20
30	12/182
31	12/181
32	6/16,12/183,15/28
35	12/220
37	10/38
38	——
40	12/269
41	12/279
42	12/278
43	12/288

Degree 11:

5	12/179
6	12/272

Degree 12:

3	6/3
4	4/4,6/4
4	6/4
6	6/6,8/13,12/7
7	——
8	4/5,6/7,6/8, 8/14,12/9
9	——
16	6/9,9/8
17	6/10,9/9
21	6/11,8/24,12/22, 12/23,12/24
22	——
23	——
24	——
33	5/4,6/12,10/7, 15/5
34	6/13,9/16,12/35, 12/36
35	——
36	——

74	5/5,6/14,10/12, 10/13,15/10
75	10/11,12/76
76	——
87	12/88
88	——
89	12/92
91	12/93
92	12/89
93	12/91
95	12/96,12/97
96	——
97	——
99	12/105
100	12/101,12/103,12/106
101	——
102	12/107
103	12/100,12/101,12/106
105	12/99
106	12/100,12/101,12/103
107	12/102
108	8/41,12/109,12/110, 12/111
109	——
110	——
111	——
112	12/113,12/114,12/115
113	——
114	——
115	——
116	12/120
120	——
122	9/23
123	10/22
126	8/42,12/128,12/129
128	8/42,12/126,12/129
129	——
132	9/25,12/133
133	——
134	12/142
135	12/148
136	12/137
137	——
138	12/140
140	——
142	12/134
145	12/146
146	——
147	12/149
148	12/135
149	12/147
152	12/154
153	12/155
154	12/152
155	12/153
157	9/26
160	8/46,12/162
161	8/45,12/163,12/165
162	8/46,12/160
163	8/45,12/161,12/165
165	——
175	9/29
176	9/28
177	9/30,12/178
178	——
179	11/5
181	10/31
182	10/30
183	6/16,10/32,15/28
184	12/190,12/191
186	12/193
187	12/188
188	——
190	12/184,12/191
191	——
193	12/186
198	12/199
199	——
200	8/47,12/201, 12/202,12/203
201	——
202	——
203	——
213	9/31
220	10/35
223	12/224
224	——
226	12/227
227	——
235	12/236
236	——
237	12/238
238	——
245	12/246,12/247
246	——
247	——
251	12/253
253	——
261	12/267
262	12/264
264	——
267	12/261
269	10/40
272	11/6
278	10/42
279	10/41
288	10/43

Degree 14:

2	7/2
4	7/4
10	7/5,8/37
16	8/43
17	14/19
19	14/17
27	14/28
28	——
34	8/48
40	14/41
41	——
46	7/7
54	14/55
55	——

Degree 15:

5	5/4,6/12,10/7, 12/33
10	5/5,6/14,10/12, 10/13,12/74
15	15/16
16	——
20	6/15,10/26
21	15/22
22	——
28	6/16,10/32, 12/183
34	15/35
35	——
41	15/42
42	——
47	7/6
72	8/49
99	15/100
100	——