

Transitive Groups of Degree 12

No	Group	Order	DimCA	CAZ	DimGA	GrAZ	Cycle_Index
1	C4[x]C3	12	12	T	12	T	$\frac{1}{12}x_1^{12} + \frac{1}{12}x_2^6 + \frac{1}{6}x_3^4 + \frac{1}{6}x_4^3 + \frac{1}{6}x_6^2 + \frac{1}{3}x_{12}$
2	E4[x]C3=6x2	12	12	T	12	T	$\frac{1}{12}x_1^{12} + \frac{1}{4}x_2^6 + \frac{1}{6}x_3^4 + \frac{1}{2}x_6^2$
3	D_66[x]2=1/2[3:2]E4	12	12	F	12	F	$\frac{1}{12}x_1^{12} + \frac{7}{12}x_2^6 + \frac{1}{6}x_3^4 + \frac{1}{6}x_6^2$
4	A_412	12	12	F	12	F	$\frac{1}{12}x_1^{12} + \frac{1}{4}x_2^6 + \frac{2}{3}x_3^4$
5	1/2[3:2]4	12	12	F	12	F	$\frac{1}{12}x_1^{12} + \frac{1}{12}x_2^6 + \frac{1}{6}x_3^4 + \frac{1}{2}x_4^3 + \frac{1}{6}x_6^2$
6	A_412x2	24	8	F	21	F	$\frac{1}{24}x_1^{12} + \frac{1}{8}x_1^4x_2^4 + \frac{1}{6}x_2^6 + \frac{1}{3}x_3^4 + \frac{1}{3}x_6^2$
7	A_46[x]2=[1/82^6]3	24	8	T	24	F	$\frac{1}{24}x_1^{12} + \frac{1}{8}x_1^4x_2^4 + \frac{1}{6}x_2^6$

							$+\frac{1}{3}x_3^4 + \frac{1}{3}x_6^2$
8	S_412d	24	7	F	23	F	$\frac{1}{24}x_1^{12} + \frac{1}{4}x_1^2x_2^5 + \frac{1}{8}x_2^6 + \frac{1}{3}x_3^4 + \frac{1}{4}x_4^3$
9	$1/2[1/82^6]S3=S_412e$	24	8	F	24	F	$\frac{1}{24}x_1^{12} + \frac{1}{8}x_1^4x_2^4 + \frac{1}{4}x_2^6 + \frac{1}{4}x_2^2x_4^2 + \frac{1}{3}x_3^4$
10	S3[x]E4	24	8	T	20	F	$\frac{1}{24}x_1^{12} + \frac{1}{8}x_1^4x_2^4 + \frac{1}{2}x_2^6 + \frac{1}{12}x_3^4 + \frac{1}{4}x_6^2$
11	S3[x]C4	24	8	T	20	F	$\frac{1}{24}x_1^{12} + \frac{1}{8}x_1^4x_2^4 + \frac{1}{6}x_2^6 + \frac{1}{12}x_3^4 + \frac{1}{3}x_4^3 + \frac{1}{12}x_6^2 + \frac{1}{6}x_{12}$
12	$1/2[3:2]cD4$	24	7	T	22	F	$\frac{1}{24}x_1^{12} + \frac{1}{4}x_1^2x_2^5 + \frac{7}{24}x_2^6 + \frac{1}{12}x_3^4 + \frac{1}{12}x_4^3 + \frac{1}{12}x_6^2 + \frac{1}{6}x_{12}$

13	$1/2[3:2]eD4$	24	7	T	22	F	$\frac{1}{24}x_1^{12} + \frac{1}{4}$ $x_1^2x_2^5 + \frac{1}{8}x_2^6$ $+ \frac{1}{12}x_3^4 + \frac{1}{4}$ $x_4^3 + \frac{1}{4}x_6^2$
14	$D4[x]C3$	24	9	T	18	F	$\frac{1}{24}x_1^{12} + \frac{1}{12}$ $x_1^6x_2^3 + \frac{1}{8}x_2^6$ $+ \frac{1}{12}x_3^4 + \frac{1}{6}$ $x_3^2x_6 + \frac{1}{12}x_4^3$ $+ \frac{1}{4}x_6^2 + \frac{1}{6}$ x_{12}
15	$1/2[3:2]dD4$	24	9	F	18	F	$\frac{1}{24}x_1^{12} + \frac{1}{12}$ $x_1^6x_2^3 + \frac{7}{24}x_2^6$ $+ \frac{1}{12}x_3^4 + \frac{1}{6}$ $x_3^2x_6 + \frac{1}{4}x_4^3$ $+ \frac{1}{12}x_6^2$
16	$[3^2]E4$	36	8	F	20	F	$\frac{1}{36}x_1^{12} + \frac{1}{9}$ $x_1^6x_3^2 + \frac{5}{12}x_2^6$ $+ \frac{1}{9}x_3^4 + \frac{1}{3}x_6^2$
17	$[3^2]4$	36	8	F	20	F	$\frac{1}{36}x_1^{12} + \frac{1}{9}$ $x_1^6x_3^2 + \frac{1}{4}x_2^6$ $+ \frac{1}{9}x_3^4 + \frac{1}{2}x_4^3$
18	$[3^2]E4$	36	8	T	20	F	$\frac{1}{36}x_1^{12} + \frac{1}{9}$ $x_1^6x_3^2 + \frac{7}{36}x_2^6$

							$+\frac{1}{9}x_2^3x_6 + \frac{1}{9}x_3^4 + \frac{4}{9}x_6^2$
19	$[3^2]4$	36	8	T	20	F	$\frac{1}{36}x_1^{12} + \frac{1}{9}x_1^6x_3^2 + \frac{1}{36}x_2^6 + \frac{1}{9}x_2^3x_6 + \frac{1}{9}x_3^4 + \frac{1}{6}x_4^3 + \frac{1}{9}x_6^2 + \frac{1}{3}x_{12}$
20	$A4[x]C3$	36	6	T	30	F	$\frac{1}{36}x_1^{12} + \frac{2}{9}x_1^3x_3^3 + \frac{1}{12}x_2^6 + \frac{1}{2}x_3^4 + \frac{1}{6}x_6^2$
21	$1/2[1/42^6]S3$	48	8	F	24	F	$\frac{1}{48}x_1^{12} + \frac{1}{16}x_1^8x_2^2 + \frac{1}{16}x_1^4x_2^4 + \frac{13}{48}x_2^6 + \frac{1}{4}x_2^2x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{6}x_6^2$
22	S_{412dx2}	48	5	T	32	F	$\frac{1}{48}x_1^{12} + \frac{1}{16}x_1^4x_2^4 + \frac{1}{4}x_1^2x_2^5 + \frac{1}{12}x_2^6 + \frac{1}{6}x_3^4 + \frac{1}{4}x_4^3 + \frac{1}{6}x_6^2$
23	$S_{46d}[x]2=[1/82^6]S3$	48	6	T	28	F	$\frac{1}{48}x_1^{12} + \frac{3}{16}x_1^4x_2^4 + \frac{5}{24}x_2^6$

							$+\frac{1}{4}x_2^2x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{6}x_6^2$
24	S_46c[x]2	48	6	T	28	F	$\frac{1}{48}x_1^{12} + \frac{1}{16}x_1^4x_2^4 + \frac{1}{8}x_1^4x_2^2 + \frac{1}{3}x_2^6 + \frac{1}{8}x_2^2x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{6}x_6^2$
25	2A_46[x]2=[1/42^6]3	48	8	T	24	F	$\frac{1}{48}x_1^{12} + \frac{1}{16}x_1^8x_2^2 + \frac{1}{16}x_1^4x_2^4 + \frac{3}{16}x_2^6 + \frac{1}{6}x_3^4 + \frac{1}{2}x_6^2$
26	A_412x2^2	48	6	T	30	F	$\frac{1}{48}x_1^{12} + \frac{3}{16}x_1^4x_2^4 + \frac{1}{8}x_2^6 + \frac{1}{6}x_3^4 + \frac{1}{2}x_6^2$
27	[2]S_46_2	48	5	T	32	F	$\frac{1}{48}x_1^{12} + \frac{1}{16}x_1^4x_2^4 + \frac{1}{12}x_2^6 + \frac{1}{4}x_1^2x_2^2x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{4}x_4^3 + \frac{1}{6}x_6^2$
28	D4[x]S3	48	6	T	30	F	$\frac{1}{48}x_1^{12} + \frac{1}{24}x_1^6x_2^3 + \frac{1}{16}x_1^4x_2^4 + \frac{1}{8}x_1^2x_2^5$

							$ \begin{aligned} & + \frac{1}{4}x_2^6 + \frac{1}{24} \\ & x_3^4 + \frac{1}{12}x_3^2x_6 \\ & + \frac{1}{6}x_4^3 + \frac{1}{8}x_6^2 \\ & + \frac{1}{12}x_{12} \end{aligned} $
29	$[1/24^2]3$	48	8	T	24	F	$ \begin{aligned} & \frac{1}{48}x_1^{12} + \frac{1}{16} \\ & x_1^8x_2^2 + \frac{1}{16}x_1^4 \\ & x_2^4 + \frac{1}{48}x_2^6 + \\ & \frac{1}{6}x_3^4 + \frac{1}{6}x_4^3 \\ & + \frac{1}{6}x_6^2 + \frac{1}{3} \\ & x_{12} \end{aligned} $
30	$1/2[1/44^3]S3$	48	8	F	24	F	$ \begin{aligned} & \frac{1}{48}x_1^{12} + \frac{1}{16} \\ & x_1^8x_2^2 + \frac{1}{16}x_1^4 \\ & x_2^4 + \frac{1}{48}x_2^6 + \\ & \frac{1}{4}x_2^4x_4 + \frac{1}{6} \\ & x_3^4 + \frac{1}{4}x_4^3 + \frac{1}{6} \\ & x_6^2 \end{aligned} $
31	$[4^2]3$	48	6	T	30	F	$ \begin{aligned} & \frac{1}{48}x_1^{12} + \frac{1}{16} \\ & x_1^4x_2^4 + \frac{1}{8}x_1^4 \\ & x_4^2 + \frac{1}{8}x_2^2x_4^2 \\ & + \frac{2}{3}x_3^4 \end{aligned} $
32	$[E4^2]3$	48	6	T	30	F	$ \begin{aligned} & \frac{1}{48}x_1^{12} + \frac{3}{16} \\ & x_1^4x_2^4 + \frac{1}{8}x_2^6 \\ & + \frac{2}{3}x_3^4 \end{aligned} $

33	A_512	60	4	T	44	F	$\frac{1}{60}x_1^{12} + \frac{1}{4}x_2^6 + \frac{2}{5}x_1^2x_5^2 + \frac{1}{3}x_3^4$
34	F_36:212e	72	6	T	36	F	$\frac{1}{72}x_1^{12} + \frac{1}{18}x_1^6x_3^2 + \frac{1}{8}x_1^4x_2^4 + \frac{1}{6}x_2^6 + \frac{1}{6}x_2^4x_2^2 + \frac{1}{4}x_2^2x_6^3 + \frac{1}{4}x_2^2x_4^2 + \frac{1}{18}x_3^4 + \frac{1}{6}x_6^2$
35	[D_6^2]2=D_6wr2	72	7	F	22	F	$\frac{1}{72}x_1^{12} + \frac{1}{12}x_1^6x_2^3 + \frac{1}{18}x_1^6x_3^2 + \frac{5}{24}x_2^6 + \frac{1}{6}x_2^3x_3^2 + \frac{1}{18}x_3^4 + \frac{1}{4}x_4^3 + \frac{1}{6}x_6^2$
36	F_36:212d	72	5	T	38	F	$\frac{1}{72}x_1^{12} + \frac{1}{18}x_1^6x_3^2 + \frac{1}{12}x_1^2x_2^5 + \frac{5}{24}x_2^6 + \frac{1}{6}x_1^2x_2^2x_6^2 + \frac{1}{18}x_3^4 + \frac{1}{4}x_4^3 + \frac{1}{6}x_6^2$
37	[3^2:2]E4	72	6	T	36	F	$\frac{1}{72}x_1^{12} + \frac{1}{18}x_1^6x_3^2 + \frac{1}{8}x_1^4x_2^4$

							$x_2^4 + \frac{11}{36}x_2^6 + \frac{1}{18}x_2^3x_6 + \frac{1}{18}x_3^4 + \frac{7}{18}x_6^2$
38	$1/2[3^2:2]cD4$	72	5	T	38	F	$\frac{1}{72}x_1^{12} + \frac{1}{18}x_1^6x_3^2 + \frac{1}{4}x_1^2x_2^5 + \frac{7}{72}x_2^6 + \frac{1}{18}x_2^3x_6 + \frac{1}{18}x_3^4 + \frac{1}{12}x_4^3 + \frac{2}{9}x_6^2 + \frac{1}{6}x_{12}$
39	$[3^2:2]4$	72	6	T	36	F	$\frac{1}{72}x_1^{12} + \frac{1}{18}x_1^6x_3^2 + \frac{1}{8}x_1^4x_2^4 + \frac{5}{36}x_2^6 + \frac{1}{18}x_2^3x_6 + \frac{1}{18}x_3^4 + \frac{1}{6}x_4^3 + \frac{1}{18}x_6^2 + \frac{1}{3}x_{12}$
40	F_366[x]2	72	6	T	36	F	$\frac{1}{72}x_1^{12} + \frac{1}{18}x_1^6x_3^2 + \frac{1}{8}x_1^4x_2^4 + \frac{5}{36}x_2^6 + \frac{1}{18}x_2^3x_6 + \frac{1}{2}x_2^2x_4^2 + \frac{1}{18}x_3^4 + \frac{1}{18}x_6^2$
41	$1/2[1/42^3^2]F_366$	72	6	T	36	F	$\frac{1}{72}x_1^{12} + \frac{1}{18}$

							$x_1^6 x_3^2 + \frac{1}{8} x_1^4 x_2^4 + \frac{5}{36} x_2^6 + \frac{1}{18} x_2^3 x_6 + \frac{1}{18} x_3^4 + \frac{1}{2} x_4^3 + \frac{1}{18} x_6^2$
42	$[3^2]D4=6wr2$	72	7	T	22	F	$\frac{1}{72} x_1^{12} + \frac{1}{36} x_1^6 x_2^3 + \frac{1}{18} x_1^6 x_3^2 + \frac{1}{18} x_1^6 x_6 + \frac{7}{72} x_2^6 + \frac{1}{18} x_2^3 x_3^2 + \frac{1}{18} x_2^3 x_6 + \frac{1}{18} x_3^4 + \frac{1}{9} x_3^2 x_6 + \frac{1}{12} x_4^3 + \frac{2}{9} x_6^2 + \frac{1}{6} x_{12}$
43	$A4[x]S3$	72	4	T	50	F	$\frac{1}{72} x_1^{12} + \frac{1}{24} x_1^4 x_2^4 + \frac{1}{9} x_1^3 x_3^3 + \frac{1}{6} x_2^6 + \frac{1}{3} x_1 x_2 x_3 x_6 + \frac{1}{4} x_3^4 + \frac{1}{12} x_6^2$
44	$1/2[3:2]S4$	72	4	T	50	F	$\frac{1}{72} x_1^{12} + \frac{1}{4} x_1^2 x_2^5 + \frac{1}{9} x_1^3 x_3^3 + \frac{1}{24} x_2^6 + \frac{1}{4} x_3^4 + \frac{1}{4} x_4^3$

							$+\frac{1}{12}x_6^2$
45	S4[x]C3	72	6	T	30	F	$\frac{1}{72}x_1^{12} + \frac{1}{12}$ $x_1^6x_2^3 + \frac{1}{9}x_1^3$ $x_3^3 + \frac{1}{24}x_2^6 +$ $\frac{1}{4}x_3^4 + \frac{1}{6}x_3^2$ $x_6 + \frac{1}{12}x_4^3 +$ $\frac{1}{12}x_6^2 + \frac{1}{6}x_{12}$
46	[1/33^3:2]4_4	72	5	T	68	F	$\frac{1}{72}x_1^{12} + \frac{1}{8}$ $x_1^4x_2^4 + \frac{1}{9}x_1^3$ $x_3^3 + \frac{1}{4}x_2^2x_4^2$ $+\frac{1}{2}x_4x_8$
47	[1/33^3:2]E4_4	72	5	T	68	F	$\frac{1}{72}x_1^{12} + \frac{1}{8}$ $x_1^4x_2^4 + \frac{1}{9}x_1^3$ $x_3^3 + \frac{3}{4}x_2^2x_4^2$
48	2S_46[x]2=[1/42^6]S3	96	6	T	28	F	$\frac{1}{96}x_1^{12} + \frac{1}{32}$ $x_1^8x_2^2 + \frac{3}{32}x_1^4$ $x_2^4 + \frac{1}{16}x_1^4x_4^2$ $+\frac{9}{32}x_2^6 + \frac{3}{16}$ $x_2^2x_4^2 + \frac{1}{12}x_3^4$ $+\frac{1}{4}x_6^2$
49	[2]2S_46_2	96	4	T	50	F	$\frac{1}{96}x_1^{12} + \frac{3}{32}$ $x_1^4x_2^4 + \frac{1}{8}x_1^2$

							$x_2^5 + \frac{1}{16}x_2^6 + \frac{1}{8}x_1^2x_2x_4^2 + \frac{1}{12}x_3^4 + \frac{1}{4}x_4^3 + \frac{1}{4}x_6^2$
50	$\frac{1}{2}e[1/16D4^3]S3$	96	7	F	42	F	$\frac{1}{96}x_1^{12} + \frac{1}{32}x_1^8x_2^2 + \frac{1}{12}x_1^6x_2^3 + \frac{1}{32}x_1^4x_2^4 + \frac{13}{96}x_2^6 + \frac{1}{8}x_2^4x_4 + \frac{1}{8}x_2^2x_4^2 + x_4^2 + \frac{1}{12}x_3^4 + \frac{1}{6}x_3^2x_6 + \frac{1}{8}x_4^3 + \frac{1}{12}x_6^2$
51	$[1/16D4^3]3$	96	7	T	42	F	$\frac{1}{96}x_1^{12} + \frac{1}{32}x_1^8x_2^2 + \frac{1}{12}x_1^6x_2^3 + \frac{1}{32}x_1^4x_2^4 + \frac{3}{32}x_2^6 + \frac{1}{12}x_3^4 + \frac{1}{6}x_3^2x_6 + \frac{1}{12}x_4^3 + \frac{1}{4}x_6^2 + \frac{1}{6}x_{12}$
52	$\frac{1}{2}c[1/16D4^3]S3$	96	5	T	46	F	$\frac{1}{96}x_1^{12} + \frac{1}{32}x_1^8x_2^2 + \frac{1}{32}x_1^4x_2^5 + \frac{3}{32}x_2^6 + \frac{1}{8}$

							$x_1^2 x_2 x_4^2 + \frac{1}{8}$ $x_2^4 x_4 + \frac{1}{12} x_3^4$ $+ \frac{1}{8} x_4^3 + \frac{1}{4} x_6^2$
53	[1/24^2]S3	96	6	T	28	F	$\frac{1}{96} x_1^{12} + \frac{1}{32}$ $x_1^8 x_2^2 + \frac{3}{32} x_1^4$ $x_2^4 + \frac{1}{16} x_1^4 x_4^2$ $+ \frac{7}{96} x_2^6 + \frac{1}{8}$ $x_2^4 x_4 + \frac{1}{16} x_2^2$ $x_4^2 + \frac{1}{12} x_3^4 +$ $\frac{5}{24} x_4^3 + \frac{1}{12} x_6^2$ $+ \frac{1}{6} x_{12}$
54	[1/22^2^3]D6_4	96	5	T	46	F	$\frac{1}{96} x_1^{12} + \frac{1}{32}$ $x_1^8 x_2^2 + \frac{1}{32} x_1^4$ $x_2^4 + \frac{1}{8} x_1^2 x_2^5$ $+ \frac{13}{96} x_2^6 + \frac{1}{8}$ $x_1^2 x_2 x_4^2 + \frac{1}{8}$ $x_2^2 x_4^2 + \frac{1}{12} x_3^4$ $+ \frac{1}{12} x_4^3 + \frac{1}{12}$ $x_6^2 + \frac{1}{6} x_{12}$
55	[1/24^3]3	96	6	T	30	F	$\frac{1}{96} x_1^{12} + \frac{1}{32}$ $x_1^8 x_2^2 + \frac{1}{32} x_1^4$ $x_2^4 + \frac{1}{8} x_1^4 x_4^2$ $+ \frac{1}{96} x_2^6 + \frac{1}{8}$

							$x_2^2 x_4^2 + \frac{1}{3} x_3^4 + \frac{1}{3} x_6^2$
56	[1/22^6]3	96	6	T	30	F	$\frac{1}{96} x_1^{12} + \frac{1}{32} x_1^8 x_2^2 + \frac{5}{32} x_1^4 x_2^4 + x_2^4 + \frac{13}{96} x_2^6 + \frac{1}{3} x_3^4 + \frac{1}{3} x_6^2$
57	[1/22^2^3]A_46_4	96	5	T	48	F	$\frac{1}{96} x_1^{12} + \frac{1}{32} x_1^8 x_2^2 + \frac{1}{32} x_1^4 x_2^4 + x_2^4 + \frac{1}{4} x_1^2 x_2^3 + x_4 + \frac{1}{96} x_2^6 + \frac{1}{3} x_3^4 + \frac{1}{3} x_6^2$
58	[2^4]6	96	7	T	42	F	$\frac{1}{96} x_1^{12} + \frac{1}{16} x_1^8 x_2^2 + \frac{3}{32} x_1^4 x_2^4 + x_2^4 + \frac{1}{24} x_2^6 + \frac{1}{8} x_2^2 x_4^2 + \frac{1}{3} x_3^4 + \frac{1}{3} x_6^2$
59	[2^3]A_46	96	5	T	48	F	$\frac{1}{96} x_1^{12} + \frac{1}{24} x_1^6 x_2^3 + \frac{3}{32} x_1^4 x_2^4 + x_2^4 + \frac{1}{16} x_2^6 + \frac{1}{8} x_1^2 x_2^2 x_4^2 + \frac{1}{3} x_3^4 + \frac{1}{3} x_3^2 x_6$
60	[1/2[1/22^2]^3]2A_46_4	96	5	T	48	F	$\frac{1}{96} x_1^{12} + \frac{5}{32}$

							$x_1^4 x_2^4 + \frac{1}{16}$ $x_1^4 x_2^2 + \frac{1}{24} x_2^6$ $+ \frac{1}{16} x_2^2 x_4^2 +$ $\frac{1}{3} x_3^4 + \frac{1}{3} x_6^2$
61	[2^3]A_46_4	96	5	T	48	F	$\frac{1}{96} x_1^{12} + \frac{1}{24}$ $x_1^6 x_2^3 + \frac{1}{32} x_1^4$ $x_2^4 + \frac{1}{8} x_1^2 x_2^5$ $+ \frac{1}{16} x_1^4 x_4^2 +$ $\frac{1}{16} x_2^2 x_4^2 + \frac{1}{3}$ $x_3^4 + \frac{1}{3} x_3^2 x_6$
62	[4^2]S3	96	5	T	32	F	$\frac{1}{96} x_1^{12} + \frac{5}{32}$ $x_1^4 x_2^4 + \frac{1}{16}$ $x_1^4 x_4^2 + \frac{3}{16} x_2^2$ $x_4^2 + \frac{1}{3} x_3^4 + \frac{1}{4}$ $x_4 x_8$
63	[1/2[1 /22^2]^3]S_46d_8b	96	5	T	32	F	$\frac{1}{96} x_1^{12} + \frac{1}{32}$ $x_1^4 x_2^4 + \frac{3}{16}$ $x_1^4 x_4^2 + \frac{1}{8} x_2^6$ $+ \frac{1}{16} x_2^2 x_4^2 +$ $\frac{1}{3} x_3^4 + \frac{1}{4} x_4$ x_8
64	[1/2[1 /22^2]^3]S_46d_8a	96	4	T	50	F	$\frac{1}{96} x_1^{12} + \frac{1}{32}$ $x_1^4 x_2^4 + \frac{1}{8} x_1^2$

							$x_2^5 + \frac{1}{16} x_1^4 x_4^2$ $+ \frac{1}{8} x_1^2 x_2 x_4^2 +$ $\frac{1}{16} x_2^2 x_4^2 + \frac{1}{3}$ $x_3^4 + \frac{1}{4} x_2^2 x_8$
65	$[1/2[1/22^2]^3]S_{46c_4}$	96	4	T	50	F	$\frac{1}{96} x_1^{12} + \frac{1}{32}$ $x_1^4 x_2^4 + \frac{1}{16}$ $x_1^4 x_4^2 + \frac{1}{8} x_2^6$ $+ \frac{1}{4} x_1^2 x_2 x_8 +$ $\frac{3}{16} x_2^2 x_4^2 + \frac{1}{3}$ x_3^4
66	$[1/2[1/22^2]^3]S_{46d_2}$	96	4	T	50	F	$\frac{1}{96} x_1^{12} + \frac{3}{32}$ $x_1^4 x_2^4 + \frac{1}{8} x_1^2$ $x_2^5 + \frac{1}{16} x_2^6 +$ $\frac{1}{8} x_1^2 x_2 x_4^2 + \frac{1}{3}$ $x_3^4 + \frac{1}{4} x_4^3$
67	$[E4^2]S3$	96	5	T	32	F	$\frac{1}{96} x_1^{12} + \frac{7}{32}$ $x_1^4 x_2^4 + \frac{1}{16}$ $x_2^6 + \frac{3}{8} x_2^2 x_4^2$ $+ \frac{1}{3} x_3^4$
68	$[1/2[1/22^2]^3]S_{46c}$	96	5	T	32	F	$\frac{1}{96} x_1^{12} + \frac{3}{32}$ $x_1^4 x_2^4 + \frac{1}{8} x_1^4$ $x_4^2 + \frac{3}{16} x_2^6 +$ $\frac{1}{4} x_2^2 x_4^2 + \frac{1}{3}$

							x_3^4
69	$[2^4]D_{66}$	96	7	F	42	F	$\frac{1}{96}x_1^{12} + \frac{1}{16}x_1^8x_2^2 + \frac{3}{32}x_1^4x_2^4 + x_2^4 + \frac{1}{8}x_2^6 + \frac{3}{8}x_2^2x_4^2 + \frac{1}{3}x_3^4$
70	$1/2[3^3:2]E4$	108	6	T	36	F	$\frac{1}{108}x_1^{12} + \frac{1}{9}x_1^6x_3^2 + \frac{2}{27}x_1^3x_3^3 + x_3^3 + \frac{5}{36}x_2^6 + \frac{2}{9}x_2^3x_6 + \frac{1}{18}x_3^4 + \frac{7}{18}x_6^2$
71	$[3^3]E4$	108	6	T	36	F	$\frac{1}{108}x_1^{12} + \frac{1}{9}x_1^6x_3^2 + \frac{2}{27}x_1^3x_3^3 + x_3^3 + \frac{1}{4}x_2^6 + \frac{1}{18}x_3^4 + \frac{1}{2}x_6^2$
72	$[3^3]4$	108	6	T	36	F	$\frac{1}{108}x_1^{12} + \frac{1}{9}x_1^6x_3^2 + \frac{2}{27}x_1^3x_3^3 + x_3^3 + \frac{1}{12}x_2^6 + \frac{1}{18}x_3^4 + \frac{1}{2}x_4^3 + \frac{1}{6}x_6^2$
73	$1/2[3^3:2]4$	108	6	T	36	F	$\frac{1}{108}x_1^{12} + \frac{1}{9}x_1^6x_3^2 + \frac{2}{27}x_1^3x_3^3 + x_3^3 + \frac{1}{12}x_2^6 +$

							$\frac{1}{18}x_3^4 + \frac{1}{6}x_4^3$ $+ \frac{1}{6}x_6^2 + \frac{1}{3}$ $\times 12$
74	S_512	120	4	T	52	F	$\frac{1}{120}x_1^{12} + \frac{1}{8}$ $x_1^4 x_2^4 + \frac{1}{12}x_2^6$ $+ \frac{1}{5}x_1^2 x_5^2 + \frac{1}{4}$ $x_2^2 x_4^2 + \frac{1}{6}x_3^4$ $+ \frac{1}{6}x_6^2$
75	L6[x]2	120	4	T	52	F	$\frac{1}{120}x_1^{12} + \frac{1}{8}$ $x_1^4 x_2^4 + \frac{2}{15}x_2^6$ $+ \frac{1}{5}x_1^2 x_5^2 + \frac{1}{6}$ $x_3^4 + \frac{1}{5}x_2 x_{10}$ $+ \frac{1}{6}x_6^2$
76	[2]L6_6	120	4	T	44	F	$\frac{1}{120}x_1^{12} + \frac{1}{8}$ $x_1^4 x_2^4 + \frac{2}{15}x_2^6$ $+ \frac{1}{5}x_1^2 x_5^2 + \frac{1}{6}$ $x_3^4 + \frac{1}{5}x_2 x_{10}$ $+ \frac{1}{6}x_6^2$
77	[S3^2]E4	144	6	T	36	F	$\frac{1}{144}x_1^{12} + \frac{1}{24}$ $x_1^8 x_2^2 + \frac{1}{36}x_1^6$ $x_3^2 + \frac{1}{16}x_1^4 x_2^4$ $+ \frac{1}{12}x_1^2 x_2^2 x_3^2$ $+ \frac{7}{36}x_2^6 + \frac{1}{9}$

							$x_2^3 x_6 + \frac{1}{4} x_2^2$ $x_4^2 + \frac{1}{36} x_3^4 +$ $\frac{7}{36} x_6^2$
78	[2]F_36:2_2{S_3^2}	144	5	T	38	F	$\frac{1}{144} x_1^{12} + \frac{1}{24}$ $x_1^6 x_2^3 + \frac{1}{36} x_1^6$ $x_3^2 + \frac{1}{16} x_1^4 x_2^4$ $+ \frac{1}{24} x_1^2 x_2^5 +$ $\frac{11}{72} x_2^6 + \frac{1}{12}$ $x_1^2 x_2^2 x_6 + \frac{1}{12}$ $x_2^3 x_3^2 + \frac{1}{36} x_2^3$ $x_6 + \frac{1}{36} x_3^4 +$ $\frac{1}{4} x_4^3 + \frac{7}{36} x_6^2$
79	[S3^2]4	144	6	T	36	F	$\frac{1}{144} x_1^{12} + \frac{1}{24}$ $x_1^8 x_2^2 + \frac{1}{36} x_1^6$ $x_3^2 + \frac{1}{16} x_1^4 x_2^4$ $+ \frac{1}{12} x_1^2 x_2^2 x_3^2$ $+ \frac{1}{9} x_2^6 + \frac{1}{9} x_2^3$ $x_6 + \frac{1}{36} x_3^4 +$ $\frac{1}{3} x_4^3 + \frac{1}{36} x_6^2$ $+ \frac{1}{6} x_{12}$
80	[2]F_36:2_2{3^2:4}	144	5	T	38	F	$\frac{1}{144} x_1^{12} + \frac{1}{24}$ $x_1^6 x_2^3 + \frac{1}{36} x_1^6$ $x_3^2 + \frac{1}{16} x_1^4 x_2^4$

							$ \begin{aligned} & + \frac{1}{24} x_1^2 x_2^5 + \\ & \frac{5}{72} x_2^6 + \frac{1}{12} \\ & x_1^2 x_2^2 x_6 + \frac{1}{12} \\ & x_2^3 x_3^2 + \frac{1}{36} x_2^3 \\ & x_6 + \frac{1}{4} x_2^2 x_4^2 \\ & + \frac{1}{36} x_3^4 + \frac{1}{12} \\ & x_4^3 + \frac{1}{36} x_6^2 + \\ & \frac{1}{6} x_{12} \end{aligned} $
81	[3^2:2]D4	144	5	T	38	F	$ \begin{aligned} & \frac{1}{144} x_1^{12} + \frac{1}{72} \\ & x_1^6 x_2^3 + \frac{1}{36} x_1^6 \\ & x_3^2 + \frac{1}{16} x_1^4 x_2^4 \\ & + \frac{1}{36} x_1^6 x_6 + \\ & \frac{1}{8} x_1^2 x_2^5 + \frac{11}{72} \\ & x_2^6 + \frac{1}{36} x_2^3 x_3^2 \\ & + \frac{1}{36} x_2^3 x_6 + \\ & \frac{1}{36} x_3^4 + \frac{1}{18} \\ & x_3^2 x_6 + \frac{1}{12} x_4^3 \\ & + \frac{7}{36} x_6^2 + \frac{1}{6} \\ & x_{12} \end{aligned} $
82	[1/42^3^2]F_366	144	5	T	38	F	$ \begin{aligned} & \frac{1}{144} x_1^{12} + \frac{1}{72} \\ & x_1^6 x_2^3 + \frac{1}{36} x_1^6 \\ & x_3^2 + \frac{1}{16} x_1^4 x_2^4 \\ & + \frac{1}{36} x_1^6 x_6 + \end{aligned} $

							$\frac{1}{8}x_1^2x_2^5 + \frac{5}{72}x_2^6 + \frac{1}{36}x_2^3x_3^2 + \frac{1}{36}x_2^3x_6 + \frac{1}{4}x_2^2x_4^2 + \frac{1}{36}x_3^4 + \frac{1}{18}x_3^2x_6 + \frac{1}{4}x_4^3 + \frac{1}{36}x_6^2$
83	S4[x]S3	144	4	T	50	F	$\frac{1}{144}x_1^{12} + \frac{1}{24}x_1^6x_2^3 + \frac{1}{48}x_1^4x_2^4 + \frac{1}{8}x_1^2x_2^5 + \frac{1}{18}x_1^3x_3^3 + \frac{1}{12}x_2^6 + \frac{1}{6}x_1x_2x_3x_6 + \frac{1}{8}x_3^4 + \frac{1}{12}x_3^2x_6 + \frac{1}{6}x_4^3 + \frac{1}{24}x_6^2 + \frac{1}{12}x_{12}$
84	[1/33^3:2]D4_4	144	4	T	70	F	$\frac{1}{144}x_1^{12} + \frac{7}{48}x_1^4x_2^4 + \frac{1}{18}x_1^3x_3^3 + \frac{1}{6}x_1x_2x_3^3 + \frac{1}{6}x_1x_2x_3x_6 + \frac{3}{8}x_2^2x_3^2 + \frac{1}{4}x_4^2 + \frac{1}{4}x_4x_8$
85	[1/4E4^3:3]3	144	4	T	84	F	$\frac{1}{144}x_1^{12} + \frac{1}{16}x_1^4x_2^4 + \frac{2}{9}x_1^3x_3^3 + \frac{1}{24}x_2^6 +$

							$\frac{1}{3}x_3^4 + \frac{1}{3}x_6^2$
86	[1/16D4^3]S3	192	5	T	46	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{1}{24}x_1^6$ $x_2^3 + \frac{3}{64}x_1^4x_2^4$ $+ \frac{1}{16}x_1^2x_2^5 +$ $\frac{1}{32}x_1^4x_2^2 + \frac{9}{64}$ $x_2^6 + \frac{1}{16}x_1^2x_2^2$ $x_4^2 + \frac{1}{16}x_2^4x_4^4$ $+ \frac{3}{32}x_2^2x_4^2 +$ $\frac{1}{24}x_3^4 + \frac{1}{12}$ $x_3^2x_6 + \frac{5}{48}x_4^3$ $+ \frac{1}{8}x_6^2 + \frac{1}{12}$ x_{12}
87	[2^5]6	192	7	T	42	F	$\frac{1}{192}x_1^{12} + \frac{5}{64}$ $x_1^8x_2^2 + \frac{5}{64}x_1^4$ $x_2^4 + \frac{3}{64}x_2^6 +$ $\frac{1}{8}x_2^2x_4^2 + \frac{1}{6}$ $x_3^4 + \frac{1}{2}x_6^2$
88	[2^4]A_46	192	5	T	48	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{1}{24}x_1^6$ $x_2^3 + \frac{5}{64}x_1^4x_2^4$ $+ \frac{13}{192}x_2^6 + \frac{1}{8}$ $x_1^2x_2^2x_4^2 + \frac{1}{6}$

							$x_3^4 + \frac{1}{3}x_3^2x_6$ $+ \frac{1}{6}x_6^2$
89	[1/22^2^3]2A_46_4{n4}	192	5	T	48	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{9}{64}x_1^4$ $x_2^4 + \frac{1}{16}x_1^4x_2^2$ $+ \frac{3}{64}x_2^6 + \frac{1}{16}$ $x_2^2x_4^2 + \frac{1}{6}x_3^4$ $+ \frac{1}{2}x_6^2$
90	[E4^3]3=E4wr3	192	6	T	30	F	$\frac{1}{192}x_1^{12} + \frac{3}{64}$ $x_1^8x_2^2 + \frac{9}{64}x_1^4$ $x_2^4 + \frac{9}{64}x_2^6 +$ $\frac{1}{6}x_3^4 + \frac{1}{2}x_6^2$
91	[1/22^2^3]2A_46_4{n2}	192	5	T	48	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{1}{16}x_1^6$ $x_2x_4 + \frac{1}{64}x_1^4$ $x_2^4 + \frac{3}{16}x_1^2x_2^3$ $x_4 + \frac{3}{64}x_2^6 +$ $\frac{1}{6}x_3^4 + \frac{1}{2}x_6^2$
92	[2^4]A_46_4{n4}	192	5	T	48	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{1}{24}x_1^6$ $x_2^3 + \frac{1}{64}x_1^4x_2^4$ $+ \frac{1}{8}x_1^2x_2^5 +$

							$\frac{1}{16}x_1^4x_4^2 + \frac{1}{192}x_2^6 + \frac{1}{16}x_2^2x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{3}x_3^2x_6 + \frac{1}{6}x_6^2$
93	$[2^4]A_{46_4\{n2\}}$	192	5	T	48	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}x_1^8x_2^2 + \frac{1}{24}x_1^6x_2^3 + \frac{1}{64}x_1^4x_2^4 + \frac{1}{16}x_1^4x_2^2x_4 + \frac{1}{8}x_1^2x_2^3x_4 + \frac{1}{192}x_2^6 + \frac{1}{16}x_2^4x_4 + \frac{1}{6}x_3^4 + \frac{1}{3}x_3^2x_6 + \frac{1}{6}x_6^2$
94	$[4^3]3=4wr3$	192	6	T	30	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}x_1^8x_2^2 + \frac{1}{32}x_1^8x_4 + \frac{1}{64}x_1^4x_2^4 + \frac{1}{16}x_1^4x_2^2x_4 + \frac{1}{16}x_1^4x_4^2 + \frac{1}{192}x_2^6 + \frac{1}{32}x_2^4x_4 + \frac{1}{16}x_2^2x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{24}x_4^3 + \frac{1}{6}x_6^2$

							$+\frac{1}{3}x_{12}$
95	$[1/24^3]S3$	192	5	T	32	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{5}{64}x_1^4$ $x_2^4 + \frac{1}{8}x_1^4x_2^2$ $+\frac{13}{192}x_2^6 + \frac{1}{8}$ $x_2^2x_4^2 + \frac{1}{6}x_3^4$ $+\frac{1}{4}x_4x_8 + \frac{1}{6}$ x_6^2
96	$[1/22^2^2^3]S_{46d_8}$	192	4	T	50	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{1}{64}x_1^4$ $x_2^4 + \frac{1}{8}x_1^2x_2^5$ $+\frac{1}{16}x_1^4x_2^2 +$ $\frac{1}{192}x_2^6 + \frac{1}{8}$ $x_1^2x_2x_4^2 + \frac{1}{16}$ $x_2^2x_4^2 + \frac{1}{6}x_3^4$ $+\frac{1}{4}x_2^2x_8 + \frac{1}{6}$ x_6^2
97	$[1/22^2^2^3]S_{46c_4}$	192	4	T	50	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{1}{64}x_1^4$ $x_2^4 + \frac{1}{16}x_1^4x_2^2$ $+\frac{25}{192}x_2^6 + \frac{1}{4}$ $x_1^2x_2x_8 + \frac{3}{16}$ $x_2^2x_4^2 + \frac{1}{6}x_3^4$

							$+\frac{1}{6}x_6^2$
98	$1/2[4^3]S3$	192	5	T	32	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{1}{64}x_1^4$ $x_2^4 + \frac{1}{16}x_1^4x_2^2$ $+\frac{1}{192}x_2^6 + \frac{1}{8}$ $x_1^4x_8 + \frac{1}{8}x_2^4$ $x_4 + \frac{1}{16}x_2^2x_4^2$ $+\frac{1}{6}x_3^4 + \frac{1}{8}x_2^2$ $x_8 + \frac{1}{8}x_4^3 + \frac{1}{6}$ x_6^2
99	$[1/22^2^2^3]2A_46_2$	192	5	T	48	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{5}{64}x_1^4$ $x_2^4 + \frac{1}{8}x_1^4x_2^2$ $x_4 + \frac{13}{192}x_2^6$ $+\frac{1}{6}x_3^4 + \frac{1}{24}$ $x_4^3 + \frac{1}{6}x_6^2 + \frac{1}{3}$ x_{12}
100	$[1/22^2^2^3]S_46d_2$	192	4	T	50	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}$ $x_1^8x_2^2 + \frac{5}{64}x_1^4$ $x_2^4 + \frac{1}{8}x_1^2x_2^5$ $+\frac{13}{192}x_2^6 + \frac{1}{8}$ $x_1^2x_2^2x_4^2 + \frac{1}{6}$ $x_3^4 + \frac{1}{4}x_4^3 + \frac{1}{6}$

							x_6^2
101	[1/22^6]S3	192	5	T	32	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}x_1^8x_2^2 + \frac{9}{64}x_1^4x_2^4 + x_2^4 + \frac{1}{16}x_1^4x_2^2 + \frac{25}{192}x_2^6 + \frac{5}{16}x_2^2x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{6}x_6^2$
102	[1/22^2^3]S_46c_2	192	4	T	50	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}x_1^8x_2^2 + \frac{5}{64}x_1^4x_2^4 + x_2^4 + \frac{13}{192}x_2^6 + \frac{1}{4}x_1^2x_2x_4^2 + \frac{1}{8}x_2^4x_4 + \frac{1}{6}x_3^4 + \frac{1}{8}x_4^3 + \frac{1}{6}x_6^2$
103	1/2[E4^3]S3	192	5	T	32	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}x_1^8x_2^2 + \frac{5}{64}x_1^4x_2^4 + x_2^4 + \frac{1}{8}x_1^4x_2^2 + \frac{37}{192}x_2^6 + \frac{1}{4}x_2^2x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{6}x_6^2$
104	[1/22^2^3]2A_46_8	192	5	T	48	F	$\frac{1}{192}x_1^{12} + \frac{1}{64}x_1^8x_2^2 + \frac{1}{16}x_1^6x_2^3 + \frac{1}{64}x_1^4x_2^4$

							$ \begin{aligned} & + \frac{1}{16} x_1^2 x_2^5 + \\ & \frac{1}{8} x_1^2 x_2^3 x_4 + \\ & \frac{1}{192} x_2^6 + \frac{1}{6} \\ & x_3^4 + \frac{1}{24} x_4^3 + \\ & \frac{1}{6} x_6^2 + \frac{1}{3} x_{12} \end{aligned} $
105	$1/2[2^6]6$	192	7	T	42	F	$ \begin{aligned} & \frac{1}{192} x_1^{12} + \frac{5}{64} \\ & x_1^8 x_2^2 + \frac{5}{64} x_1^4 \\ & x_2^4 + \frac{1}{192} x_2^6 \\ & + \frac{1}{8} x_2^4 x_4 + \frac{1}{6} \\ & x_3^4 + \frac{1}{24} x_4^3 + \\ & \frac{1}{6} x_6^2 + \frac{1}{3} x_{12} \end{aligned} $
106	$[2^5]D_{66}$	192	7	F	42	F	$ \begin{aligned} & \frac{1}{192} x_1^{12} + \frac{5}{64} \\ & x_1^8 x_2^2 + \frac{5}{64} x_1^4 \\ & x_2^4 + \frac{25}{192} x_2^6 \\ & + \frac{3}{8} x_2^2 x_4 + \frac{1}{6} \\ & x_3^4 + \frac{1}{6} x_6^2 \end{aligned} $
107	$1/2[2^6]D_6$	192	7	F	42	F	$ \begin{aligned} & \frac{1}{192} x_1^{12} + \frac{5}{64} \\ & x_1^8 x_2^2 + \frac{5}{64} x_1^4 \\ & x_2^4 + \frac{1}{192} x_2^6 \\ & + \frac{3}{8} x_2^4 x_4 + \frac{1}{6} \\ & x_3^4 + \frac{1}{8} x_4^3 + \frac{1}{6} \\ & x_6^2 \end{aligned} $

108	$1/2[2^5]D6$	192	5	T	46	F	$\frac{1}{192}x_1^{12} + \frac{1}{32}x_1^8x_2^2 + \frac{3}{64}x_1^4x_2^4 + x_2^4 + \frac{1}{16}x_1^4x_2^2 + \frac{1}{8}x_1^2x_2^3x_4 + \frac{7}{48}x_2^6 + \frac{1}{4}x_2^2x_4^2 + \frac{1}{6}x_3^2 + \frac{1}{6}x_6^2$
109	$[2^4]D6$	192	5	T	46	F	$\frac{1}{192}x_1^{12} + \frac{1}{32}x_1^8x_2^2 + \frac{7}{64}x_1^4x_2^4 + x_2^4 + \frac{1}{8}x_1^2x_2^3x_4 + x_4 + \frac{1}{12}x_2^6 + \frac{5}{16}x_2^2x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{6}x_6^2$
110	$[2^3]S_{46d}$	192	4	T	50	F	$\frac{1}{192}x_1^{12} + \frac{1}{48}x_1^6x_2^3 + \frac{7}{64}x_1^4x_2^4 + x_2^4 + \frac{1}{16}x_1^2x_2^5 + \frac{1}{32}x_2^6 + \frac{1}{8}x_1^2x_2x_4^2 + \frac{3}{16}x_2^2x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{6}x_3^2x_6 + \frac{1}{8}x_4^3$
111	$[2^3]S_{46_2}$	192	4	T	50	F	$\frac{1}{192}x_1^{12} + \frac{1}{48}x_1^6x_2^3 + \frac{3}{64}x_1^4x_2^4$

							$x_2^4 + \frac{1}{16}x_1^2x_2^5$ $+ \frac{1}{16}x_1^4x_4^2 +$ $\frac{3}{32}x_2^6 + \frac{1}{8}x_1^2$ $x_2x_4^2 + \frac{1}{8}x_2^2$ $x_4^2 + \frac{1}{6}x_3^4 + \frac{1}{6}$ $x_3^2x_6 + \frac{1}{8}x_4^3$
112	$\frac{1}{2}[1/22^2]^3]2S_{46_8}$	192	4	T	50	F	$\frac{1}{192}x_1^{12} + \frac{5}{64}$ $x_1^4x_2^4 + \frac{3}{32}x_1^4$ $x_4^2 + \frac{7}{48}x_2^6 +$ $\frac{1}{8}x_1^2x_2x_8 +$ $\frac{3}{32}x_2^2x_4^2 + \frac{1}{6}$ $x_3^4 + \frac{1}{8}x_4x_8$ $+ \frac{1}{6}x_6^2$
113	$\frac{1}{2}[1/22^2]^3]2S_{46_4}$	192	4	T	50	F	$\frac{1}{192}x_1^{12} + \frac{9}{64}$ $x_1^4x_2^4 + \frac{1}{32}x_1^4$ $x_4^2 + \frac{1}{12}x_2^6 +$ $\frac{1}{8}x_1^2x_2x_8 +$ $\frac{5}{32}x_2^2x_4^2 + \frac{1}{6}$ $x_3^4 + \frac{1}{8}x_4x_8$ $+ \frac{1}{6}x_6^2$
114	$[2^3]S_{46_4}$	192	4	T	50	F	$\frac{1}{192}x_1^{12} + \frac{1}{48}$ $x_1^6x_2^3 + \frac{5}{64}x_1^4$ $x_2^4 + \frac{1}{8}x_1^2x_2^5$

							$ \begin{aligned} & + \frac{1}{32} x_1^4 x_4^2 + \\ & \frac{1}{16} x_1^2 x_2 x_4^2 + \\ & \frac{3}{32} x_2^2 x_4^2 + \frac{1}{6} \\ & x_3^4 + \frac{1}{8} x_2^2 x_8 \\ & + \frac{1}{6} x_3^2 x_6 + \frac{1}{8} \\ & x_4 x_8 \end{aligned} $
115	[2^3]S_46_8	192	4	T	50	F	$ \begin{aligned} & \frac{1}{192} x_1^{12} + \frac{1}{48} \\ & x_1^6 x_2^3 + \frac{1}{64} x_1^4 \\ & x_2^4 + \frac{1}{8} x_1^2 x_2^5 \\ & + \frac{3}{32} x_1^4 x_4^2 + \\ & \frac{1}{16} x_2^6 + \frac{1}{16} \\ & x_1^2 x_2 x_4^2 + \frac{1}{32} \\ & x_2^2 x_4^2 + \frac{1}{6} x_3^4 \\ & + \frac{1}{8} x_2^2 x_8 + \frac{1}{6} \\ & x_3^2 x_6 + \frac{1}{8} x_4 \\ & x_8 \end{aligned} $
116	[3^3]D4	216	5	T	38	F	$ \begin{aligned} & \frac{1}{216} x_1^{12} + \frac{1}{36} \\ & x_1^6 x_2^3 + \frac{1}{18} x_1^6 \\ & x_3^2 + \frac{1}{27} x_1^3 x_3^3 \\ & + \frac{1}{8} x_2^6 + \frac{1}{9} x_1^3 \\ & x_3 x_6 + \frac{1}{18} x_2^3 \\ & x_3^2 + \frac{1}{36} x_3^4 + \\ & \frac{1}{18} x_3^2 x_6 + \frac{1}{4} \end{aligned} $

							$x_4^3 + \frac{1}{4}x_6^2$
117	$[3^3:2]E4$	216	5	T	68	F	$\frac{1}{216}x_1^{12} + \frac{1}{18}$ $x_1^6x_3^2 + \frac{1}{8}x_1^4$ $x_2^4 + \frac{1}{27}x_1^3x_3^3$ $+\frac{1}{6}x_2^6 + \frac{1}{6}x_2^3$ $x_6 + \frac{1}{36}x_3^4 +$ $\frac{5}{12}x_6^2$
118	$1/2[3^3:2]eD4$	216	4	T	70	F	$\frac{1}{216}x_1^{12} + \frac{1}{18}$ $x_1^6x_3^2 + \frac{1}{12}x_1^2$ $x_2^5 + \frac{1}{27}x_1^3x_3^3$ $+\frac{1}{8}x_2^6 + \frac{1}{6}x_1^2$ $x_2^2x_6 + \frac{1}{36}x_3^4$ $+\frac{1}{12}x_4^3 + \frac{1}{4}$ $x_6^2 + \frac{1}{6}x_{12}$
119	$[3^3:2]4$	216	5	T	68	F	$\frac{1}{216}x_1^{12} + \frac{1}{18}$ $x_1^6x_3^2 + \frac{1}{8}x_1^4$ $x_2^4 + \frac{1}{27}x_1^3x_3^3$ $+\frac{1}{18}x_2^6 + \frac{1}{18}$ $x_2^3x_6 + \frac{1}{36}x_3^4$ $+\frac{1}{3}x_4^3 + \frac{5}{36}$ $x_6^2 + \frac{1}{6}x_{12}$
120	$1/2[3^3:2]cD4$	216	4	T	70	F	$\frac{1}{216}x_1^{12} + \frac{1}{18}$

							$x_1^6 x_3^2 + \frac{1}{12} x_1^2$ $x_2^5 + \frac{1}{27} x_1^3 x_3^3$ $+ \frac{5}{72} x_2^6 + \frac{1}{6}$ $x_1^2 x_2^2 x_6 + \frac{1}{9}$ $x_2^3 x_6 + \frac{1}{36} x_3^4$ $+ \frac{1}{4} x_4^3 + \frac{7}{36}$ x_6^2
121	$\frac{1}{2}[3^3:2]dD4$	216	5	T	38	F	$\frac{1}{216} x_1^{12} + \frac{1}{36}$ $x_1^6 x_2^3 + \frac{1}{18} x_1^6$ $x_3^2 + \frac{1}{27} x_1^3 x_3^3$ $+ \frac{5}{72} x_2^6 + \frac{1}{9}$ $x_1^3 x_3 x_6 + \frac{1}{18}$ $x_2^3 x_3^2 + \frac{1}{9} x_2^3$ $x_6 + \frac{1}{36} x_3^4 +$ $\frac{1}{18} x_3^2 x_6 + \frac{1}{12}$ $x_4^3 + \frac{7}{36} x_6^2 +$ $\frac{1}{6} x_{12}$
122	$[1/33^3:2]A4_4$	216	3	T	74	F	$\frac{1}{216} x_1^{12} + \frac{1}{24}$ $x_1^4 x_2^4 + \frac{4}{27} x_1^3$ $x_3^3 + \frac{1}{3} x_1 x_2$ $x_3 x_6 + \frac{1}{4} x_2^2$ $x_4^2 + \frac{2}{9} x_3^4$

123	L6:2[x]2	240	4	T	52	F	$\frac{1}{240}x_1^{12} + \frac{1}{16}x_1^4x_2^4 + \frac{1}{8}x_1^4x_4^2 + \frac{3}{20}x_2^6 + \frac{1}{10}x_1^2x_5^2 + \frac{1}{8}x_2^2x_4^2 + \frac{1}{12}x_3^4 + \frac{1}{10}x_2x_{10} + \frac{1}{4}x_6^2$
124	[2]L6:2_12	240	3	T	62	F	$\frac{1}{240}x_1^{12} + \frac{1}{16}x_1^4x_2^4 + \frac{1}{15}x_2^6 + \frac{1}{4}x_1^2x_2x_4^2 + \frac{1}{10}x_1^2x_5^2 + \frac{1}{12}x_3^4 + \frac{1}{12}x_4^3 + \frac{1}{10}x_2x_{10} + \frac{1}{12}x_6^2 + \frac{1}{6}x_{12}$