Σ of type G2

subset H	type of H	single cell	free	orbit basis
		CHAMBER	(FREE)	(YES)
1	A_1	CHAMBER	(FREE)	(YES)
2	A_1	CHAMBER	(FREE)	(YES)
1, 2	G_2	CHAMBER	(FREE)	(YES)

Σ of type F4

subset H	type of H	single cell	free	orbit basis
		CHAMBER	(FREE)	(YES)
1	A_1	CHAMBER	(FREE)	(YES)
2	A_1	CHAMBER	(FREE)	(YES)
3	A_1	CHAMBER	(FREE)	(YES)
4	A_1	CHAMBER	(FREE)	(YES)
1, 2	A_2	CHAMBER	(FREE)	(YES)
3, 4	A_2	CHAMBER	(FREE)	(YES)
2,3	B_2	CHAMBER	(FREE)	(YES)
1, 2, 3	B_3	no	FREE	YES
2, 3, 4	C_3	no	no	(YES)
1, 2, 3, 4	F_4	CHAMBER	(FREE)	(YES)
1,3	$A_1 \times A_1$	no	FREE	YES
1, 4	$A_1 \times A_1$	no	FREE	YES
2, 4	$A_1 \times A_1$	no	FREE	YES
1, 2, 4	$A_1 \times A_2$	no	FREE	YES
1, 3, 4	$A_1 \times A_2$	no	FREE	YES

Σ of type E6

subset H	type of H	single	free	orbit
		cell		basis
		CHAMBER	(FREE)	(YES)
1	A_1	CHAMBER	(FREE)	(YES)
2	A_1	CHAMBER	(FREE)	(YES)
3	A_1	CHAMBER	(FREE)	(YES)
4	A_1	CHAMBER	(FREE)	(YES)
5	A_1	CHAMBER	(FREE)	(YES)
6	A_1	CHAMBER	(FREE)	(YES)
1,3	A_2	CHAMBER	(FREE)	(YES)
2,4	A_2	CHAMBER	(FREE)	(YES)
3, 4	A_2	CHAMBER	(FREE)	(YES)
4,5	A_2	CHAMBER	(FREE)	(YES)
5,6	A_2	CHAMBER	(FREE)	(YES)
1, 3, 4	A_3	CHAMBER	(FREE)	(YES)
2, 3, 4	A_3	CHAMBER	(FREE)	(YES)
2, 4, 5	A_3	CHAMBER	(FREE)	(YES)
3, 4, 5	A_3	CHAMBER	(FREE)	(YES)
4, 5, 6	A_3	CHAMBER	(FREE)	(YES)
1, 2, 3, 4	A_4	CHAMBER	(FREE)	(YES)
1, 3, 4, 5	A_4	CHAMBER	(FREE)	(YES)
2, 4, 5, 6	A_4	CHAMBER	(FREE)	(YES)
3, 4, 5, 6	A_4	CHAMBER	(FREE)	(YES)
1, 3, 4, 5, 6	A_5	no	FREE	YES
2, 3, 4, 5	D_4	no	no	(no)
1, 2, 3, 4, 5	D_5	no	no	(no)
2, 3, 4, 5, 6	D_5	no	no	(no)
1, 2, 3, 4, 5, 6	E_6	CHAMBER	(FREE)	(YES)
1, 2	$A_1 \times A_1$	no	FREE	no
1,4	$A_1 \times A_1$	no	FREE	no
1,5	$A_1 \times A_1$	no	FREE	no
1,6	$A_1 \times A_1$	no	FREE	no
2,3	$A_1 \times A_1$	no	FREE	no
2,5	$A_1 \times A_1$	no	FREE	no
2,6	$A_1 \times A_1$	no	FREE	no
3, 5	$A_1 \times A_1$	no	FREE	no
3,6	$A_1 \times A_1$	no	FREE	no
4, 6	$A_1 \times A_1$	no	FREE	no
1, 2, 3	$A_1 \times A_2$	no	FREE	no
1, 2, 4	$A_1 \times A_2$	no	FREE	no
1, 3, 5	$A_1 \times A_2$	no	FREE	no
1, 3, 6	$A_1 \times A_2$	no	FREE	no

1, 4, 5	$A_1 \times A_2$	no	FREE	no
1, 5, 6	$A_1 \times A_2$	no	FREE	no
2, 4, 6	$A_1 \times A_2$	no	FREE	no
2, 5, 6	$A_1 \times A_2$	no	FREE	no
3, 4, 6	$A_1 \times A_2$	no	FREE	no
3, 5, 6	$A_1 \times A_2$	no	FREE	no
1, 2, 4, 5	$A_1 \times A_3$	no	FREE	no
1, 3, 4, 6	$A_1 \times A_3$	no	FREE	no
1, 4, 5, 6	$A_1 \times A_3$	no	FREE	no
2, 3, 4, 6	$A_1 \times A_3$	no	FREE	no
1, 2, 3, 4, 6	$A_1 \times A_4$	no	FREE	no
1, 2, 4, 5, 6	$A_1 \times A_4$	no	FREE	no
1, 3, 5, 6	$A_2 \times A_2$	no	FREE	no
1, 2, 5	$A_1 \times A_1 \times A_1$	no	FREE	no
1, 2, 6	$A_1 \times A_1 \times A_1$	no	FREE	no
1, 4, 6	$A_1 \times A_1 \times A_1$	no	FREE	no
2, 3, 5	$A_1 \times A_1 \times A_1$	no	FREE	no
2, 3, 6	$A_1 \times A_1 \times A_1$	no	FREE	no
1, 2, 3, 5	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 2, 3, 6	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 2, 4, 6	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 2, 5, 6	$A_1 \times A_1 \times A_2$	no	FREE	no
2, 3, 5, 6	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 2, 3, 5, 6	$A_1 \times A_2 \times A_2$	no	FREE	no

Σ of type E7

subset H	$\mathbf{type} \mathbf{of} H$	single cell	free	orbit basis
			(EDEE)	
1	4	CHAMBER	(FREE)	(YES)
1	A_1	CHAMBER	(FREE)	(YES)
2	A_1	CHAMBER	(FREE)	(YES)
3	A_1	CHAMBER	(FREE)	(YES)
4	A_1	CHAMBER	(FREE)	(YES)
5	A_1	CHAMBER	(FREE)	(YES)
6	A_1	CHAMBER	(FREE)	(YES)
7	A_1	CHAMBER	(FREE)	(YES)
1,3	A_2	CHAMBER	(FREE)	(YES)
2,4	A_2	CHAMBER	(FREE)	(YES)
3, 4	A_2	CHAMBER	(FREE)	(YES)
4, 5	A_2	CHAMBER	(FREE)	(YES)
5,6	A_2	CHAMBER	(FREE)	(YES)
6, 7	A_2	CHAMBER	(FREE)	(YES)
1, 3, 4	A_3	CHAMBER	(FREE)	(YES)
2, 3, 4	A_3	CHAMBER	(FREE)	(YES)
2, 4, 5	A_3	CHAMBER	(FREE)	(YES)
3, 4, 5	A_3	CHAMBER	(FREE)	(YES)
4, 5, 6	A_3	CHAMBER	(FREE)	(YES)
5, 6, 7	A_3	CHAMBER	(FREE)	(YES)
1, 2, 3, 4	A_4	CHAMBER	(FREE)	(YES)
1, 3, 4, 5	A_4	CHAMBER	(FREE)	(YES)
2, 4, 5, 6	A_4	CHAMBER	(FREE)	(YES)
3, 4, 5, 6	A_4	CHAMBER	(FREE)	(YES)
4, 5, 6, 7	A_4	CHAMBER	(FREE)	(YES)
1, 3, 4, 5, 6	A_5	no	FREE	YES
2, 4, 5, 6, 7	A_5	CHAMBER	(FREE)	(YES)
3, 4, 5, 6, 7	A_5	no	FREE	YES
1, 3, 4, 5, 6, 7	A_6	no	FREE	YES
2, 3, 4, 5	D_4	no	no	(no)
1, 2, 3, 4, 5	D_5	no	no	(no)
2, 3, 4, 5, 6	D_5	no	no	(no)
2, 3, 4, 5, 6, 7	D_6	no	no	(no)
1, 2, 3, 4, 5, 6	E_6	CHAMBER	(FREE)	(YES)
1, 2, 3, 4, 5, 6, 7	E_7	CHAMBER	(FREE)	(YES)
1, 2	$A_1 \times A_1$	no	FREE	no
1,4	$A_1 \times A_1$	no	FREE	no
1,5	$A_1 \times A_1$	no	FREE	no
1,6	$A_1 \times A_1$	no	FREE	no
1,7	$A_1 \times A_1$		FREE	

2,3	$A_1 \times A_1$	no	FREE	no
2,5	$A_1 \times A_1$	no	FREE	no
2,6	$A_1 \times A_1$	no	FREE	no
2,7	$A_1 \times A_1$	no	FREE	no
3,5	$A_1 \times A_1$	no	FREE	no
3, 6	$A_1 \times A_1$	no	FREE	no
3, 7	$A_1 \times A_1$	no	FREE	no
4,6	$A_1 \times A_1$	no	FREE	no
4,7	$A_1 \times A_1$	no	FREE	no
5, 7	$A_1 \times A_1$	no	FREE	no
1, 2, 3	$A_1 \times A_2$	no	FREE	no
1, 2, 4	$A_1 \times A_2$	no	FREE	no
1, 3, 5	$A_1 \times A_2$	no	FREE	no
1, 3, 6	$A_1 \times A_2$	no	FREE	no
1, 3, 7	$A_1 \times A_2$	no	FREE	no
1, 4, 5	$A_1 \times A_2$	no	FREE	no
1, 5, 6	$A_1 \times A_2$	no	FREE	no
1, 6, 7	$A_1 \times A_2$	no	FREE	no
2, 4, 6	$A_1 \times A_2$ $A_1 \times A_2$	no	FREE	no
2, 4, 7	$A_1 \times A_2$ $A_1 \times A_2$	no	FREE	no
2, 5, 6	$A_1 \times A_2$ $A_1 \times A_2$	no	FREE	no
2, 6, 7	$A_1 \times A_2$ $A_1 \times A_2$		FREE	
3, 4, 6	$A_1 \times A_2$ $A_1 \times A_2$	no	FREE	no
3, 4, 0 $3, 4, 7$	$A_1 \times A_2$ $A_1 \times A_2$	no	FREE	no
		no		no
3, 5, 6	$A_1 \times A_2$	no	FREE	no
3, 6, 7	$A_1 \times A_2$	no	FREE	no
4, 5, 7	$A_1 \times A_2$	no	FREE	no
4, 6, 7	$A_1 \times A_2$	no	FREE	no
1, 2, 4, 5	$A_1 \times A_3$	no	FREE	no
1, 3, 4, 6	$A_1 \times A_3$	no	FREE	no
1, 3, 4, 7	$A_1 \times A_3$	no	FREE	no
1, 4, 5, 6	$A_1 \times A_3$	no	FREE	no
1, 5, 6, 7	$A_1 \times A_3$	no	FREE	no
2, 3, 4, 6	$A_1 \times A_3$	no	FREE	no
2, 3, 4, 7	$A_1 \times A_3$	no	FREE	no
2, 4, 5, 7	$A_1 \times A_3$	no	no	(no)
2, 5, 6, 7	$A_1 \times A_3$	no	no	(no)
3, 4, 5, 7	$A_1 \times A_3$	no	FREE	no
3, 5, 6, 7	$A_1 \times A_3$	no	FREE	no
1, 2, 3, 4, 6	$A_1 \times A_4$	no	FREE	no
1, 2, 3, 4, 7	$A_1 \times A_4$	no	FREE	no
1, 2, 4, 5, 6	$A_1 \times A_4$	no	FREE	no
1, 3, 4, 5, 7	$A_1 \times A_4$	no	FREE	no
1, 4, 5, 6, 7	$A_1 \times A_4$	no	FREE	no
1, 2, 4, 5, 6, 7	$A_1 \times A_5$	no	FREE	no
2, 3, 4, 5, 7	$A_1 \times D_4$	no	no	(no)
				, ,

1 0 2 4 5 7	4 × D			()
1, 2, 3, 4, 5, 7	$A_1 \times D_5 \\ A_2 \times A_2$	no	$_{ m po}^{ m no}$	(no)
1, 3, 5, 6	$A_2 \times A_2$ $A_2 \times A_2$	no	\overline{FREE}	no
1, 3, 6, 7 2, 4, 6, 7	$A_2 \times A_2$ $A_2 \times A_2$	no	\overline{FREE}	no
3, 4, 6, 7	$A_2 \times A_2$ $A_2 \times A_2$	no	FREE	no
1, 3, 4, 6, 7	$A_2 \times A_2$ $A_2 \times A_3$	no	FREE	no
1, 3, 4, 6, 7 1, 3, 5, 6, 7	$A_2 \times A_3$ $A_2 \times A_3$	no	FREE	no
1, 3, 5, 6, 7 2, 3, 4, 6, 7	$A_2 \times A_3$ $A_2 \times A_3$	no	FREE	no
	$A_2 \times A_3$ $A_2 \times A_4$	no	FREE	no
1, 2, 3, 4, 6, 7	$A_2 \times A_4$ $A_1 \times A_1 \times A_1$	no		no
1, 2, 5	$A_1 \times A_1 \times A_1$ $A_1 \times A_1 \times A_1$	no	$egin{array}{c} \mathrm{FREE} \ \mathrm{FREE} \end{array}$	no
1, 2, 6		no		no
1, 2, 7	$A_1 \times A_1 \times A_1 \\ A_1 \times A_1 \times A_1$	no	$egin{array}{c} \mathrm{FREE} \ \mathrm{FREE} \end{array}$	no
1, 4, 6		no		no
1, 4, 7	$A_1 \times A_1 \times A_1$	no	FREE	no
1, 5, 7	$A_1 \times A_1 \times A_1$	no	FREE	no
2, 3, 5	$A_1 \times A_1 \times A_1$	no	FREE	no
2, 3, 6	$A_1 \times A_1 \times A_1$	no	FREE	no
2, 3, 7	$A_1 \times A_1 \times A_1$	no	FREE	no
2, 5, 7	$A_1 \times A_1 \times A_1$	no	no EDEE	(no)
3, 5, 7	$A_1 \times A_1 \times A_1$	no	FREE	no
1, 2, 3, 5	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 2, 3, 6	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 2, 3, 7	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 2, 4, 6	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 2, 4, 7	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 2, 5, 6	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 2, 6, 7	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 3, 5, 7	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 4, 5, 7	$A_1 \times A_1 \times A_2$	no	FREE	no
1, 4, 6, 7	$A_1 \times A_1 \times A_2$	no	FREE	no
2, 3, 5, 6	$A_1 \times A_1 \times A_2$	no	FREE	no
2, 3, 6, 7	$A_1 \times A_1 \times A_2$	no	FREE	no (na)
1, 2, 4, 5, 7	$A_1 \times A_1 \times A_3$	no	no	(no)
1, 2, 5, 6, 7	$A_1 \times A_1 \times A_3$	no	no	(no)
2, 3, 5, 6, 7	$A_1 \times A_1 \times A_3$	no	no Educa	(no)
1, 2, 3, 5, 6	$A_1 \times A_2 \times A_2$	no	FREE	no
1, 2, 3, 6, 7	$A_1 \times A_2 \times A_2$	no	FREE	no
1, 2, 4, 6, 7	$A_1 \times A_2 \times A_2$	no	FREE	no
1, 2, 3, 5, 6, 7	$A_1 \times A_2 \times A_3$	no	no	(no)
1, 2, 5, 7	$A_1 \times A_1 \times A_1 \times A_1$	no	no	(no)
2, 3, 5, 7	$A_1 \times A_1 \times A_1 \times A_1$	no	no	(no)
1, 2, 3, 5, 7	$A_1 \times A_1 \times A_1 \times A_2$	no	no	(no)

Σ of type E8

subset H	type of H	$egin{aligned} \mathbf{single} \ \mathbf{cell} \end{aligned}$	free	orbit basis
		CHAMBER	(FREE)	(???)
1	A_1	CHAMBER	(FREE)	(???)
2	A_1	CHAMBER	(FREE)	(???)
3	A_1	CHAMBER	(FREE)	(???)
4	A_1	CHAMBER	(FREE)	(???)
5	A_1	CHAMBER	(FREE)	(???)
6	A_1	CHAMBER	(FREE)	(???)
7	A_1	CHAMBER	(FREE)	(???)
8	A_1	CHAMBER	(FREE)	(???)
1,3	A_2	CHAMBER	(FREE)	(???)
2,4	A_2^2	CHAMBER	(FREE)	(???)
3,4	A_2^2	CHAMBER	(FREE)	(???)
4,5	A_2^2	CHAMBER	(FREE)	(???)
5,6	A_2	CHAMBER	(FREE)	(???)
6,7	A_2^2	CHAMBER	(FREE)	(???)
7,8	A_2^2	CHAMBER	(FREE)	(???)
1, 3, 4	A_3	CHAMBER	(FREE)	(???)
2, 3, 4	A_3	CHAMBER	(FREE)	(???)
2,4,5	A_3	CHAMBER	(FREE)	(???)
3, 4, 5	A_3	CHAMBER	(FREE)	(???)
4, 5, 6	A_3	CHAMBER	(FREE)	(???)
5, 6, 7	A_3	CHAMBER	(FREE)	(???)
6, 7, 8	A_3	CHAMBER	(FREE)	(???)
1, 2, 3, 4	A_4	CHAMBER	(FREE)	(???)
1, 3, 4, 5	A_4	CHAMBER	(FREE)	(???)
2, 4, 5, 6	A_4	CHAMBER	(FREE)	(???)
3, 4, 5, 6	A_4	CHAMBER	(FREE)	(???)
4, 5, 6, 7	A_4	CHAMBER	(FREE)	(???)
5, 6, 7, 8	A_4	CHAMBER	(FREE)	(???)
1, 3, 4, 5, 6	A_5	no	FREE	`???´
2, 4, 5, 6, 7	A_5	no	FREE	???
3, 4, 5, 6, 7	A_5	no	FREE	???
4, 5, 6, 7, 8	A_5°	no	FREE	???
1, 3, 4, 5, 6, 7	A_6°	no	FREE	???
2, 4, 5, 6, 7, 8	A_6°	no	FREE	???
3, 4, 5, 6, 7, 8	A_6	no	FREE	???
1, 3, 4, 5, 6, 7, 8	A_7	no	FREE	???
2, 3, 4, 5	D_4	no	no	(???)
1, 2, 3, 4, 5	D_5^{2}	no	no	(???)
2, 3, 4, 5, 6	D_5°	no	no	(???)

224567	D	***	***	(???)
2, 3, 4, 5, 6, 7 2, 3, 4, 5, 6, 7, 8	$D_6 D_7$	no no	no	(???)
1, 2, 3, 4, 5, 6	E_6	CHAMBER	no (FREE)	(???)
1, 2, 3, 4, 5, 6 $1, 2, 3, 4, 5, 6, 7$	E_6	no	no	(???)
1, 2, 3, 4, 5, 6, 7, 8	E_8	CHAMBER	(FREE)	(???)
1, 2, 3, 1, 3, 3, 7, 3	$A_1 \times A_1$	no	FREE	???
1, 2 $1, 4$	$A_1 \times A_1$	no	FREE	???
1, 5	$A_1 \times A_1$	no	FREE	???
1, 6	$A_1 \times A_1$	no	FREE	???
1, 7	$A_1 \times A_1$	no	FREE	???
1,8	$A_1 \times A_1$	no	FREE	???
2,3	$A_1 \times A_1$	no	FREE	???
2,5	$A_1 \times A_1$	no	FREE	???
2,6	$A_1 \times A_1$	no	FREE	???
2,7	$A_1 \times A_1$	no	FREE	???
2,8	$A_1 \times A_1$	no	FREE	???
3, 5	$A_1 \times A_1$	no	FREE	???
3, 6	$A_1 \times A_1$	no	FREE	???
3,7	$A_1 \times A_1$	no	FREE	???
3, 8	$A_1 \times A_1$	no	FREE	???
4,6	$A_1 \times A_1$	no	FREE	???
4,7	$A_1 \times A_1$	no	FREE	???
4, 8	$A_1 \times A_1$	no	FREE	???
5,7	$A_1 \times A_1$	no	FREE	???
5,8	$A_1 \times A_1$	no	FREE	???
6, 8	$A_1 \times A_1$	no	FREE	???
1, 2, 3	$A_1 \times A_2$	no	FREE	???
1, 2, 4	$A_1 \times A_2$	no	FREE	???
1, 3, 5	$A_1 \times A_2$	no	FREE	???
1, 3, 6	$A_1 \times A_2$	no	FREE	???
1, 3, 7	$A_1 \times A_2$	no	FREE	???
1, 3, 8	$A_1 \times A_2$	no	FREE	???
1, 4, 5	$A_1 \times A_2$	no	FREE	???
1, 5, 6	$A_1 \times A_2$	no	FREE	???
1, 6, 7	$A_1 \times A_2$	no	FREE	???
1, 7, 8	$A_1 \times A_2$	no	FREE	???
2, 4, 6	$A_1 \times A_2$	no	FREE	???
2, 4, 7	$A_1 \times A_2$	no	FREE	???
2, 4, 8	$A_1 \times A_2$	no	FREE	???
2, 5, 6	$A_1 \times A_2$	no	FREE	???
2, 6, 7	$A_1 \times A_2$	no	FREE	???
2, 7, 8	$A_1 \times A_2$	no	FREE	???
3, 4, 6	$A_1 \times A_2$	no	FREE	???
3, 4, 7	$A_1 \times A_2$	no	FREE	???
3, 4, 8	$A_1 \times A_2$	no	FREE	???
3, 5, 6	$A_1 \times A_2$	no	FREE	???

3, 6, 7	$A_1 \times A_2$	no	FREE	???
3, 7, 8	$A_1 \times A_2$	no	FREE	???
4, 5, 7	$A_1 \times A_2$	no	FREE	???
4, 5, 8	$A_1 \times A_2$	no	FREE	???
4, 6, 7	$A_1 \times A_2$	no	FREE	???
4, 7, 8	$A_1 \times A_2$	no	FREE	???
5, 6, 8	$A_1 \times A_2$	no	FREE	???
5, 7, 8	$A_1 \times A_2$		FREE	???
		no		
1, 2, 4, 5	$A_1 \times A_3$	no	FREE	???
1, 3, 4, 6	$A_1 \times A_3$	no	FREE	???
1, 3, 4, 7	$A_1 \times A_3$	no	FREE	???
1, 3, 4, 8	$A_1 \times A_3$	no	FREE	???
1, 4, 5, 6	$A_1 \times A_3$	no	FREE	???
1, 5, 6, 7	$A_1 \times A_3$	no	FREE	???
				???
1, 6, 7, 8	$A_1 \times A_3$	no	FREE	
2, 3, 4, 6	$A_1 \times A_3$	no	FREE	???
2, 3, 4, 7	$A_1 \times A_3$	no	FREE	???
2, 3, 4, 8	$A_1 \times A_3$	no	FREE	???
2, 4, 5, 7	$A_1 \times A_3$	no	FREE	???
2, 4, 5, 8	$A_1 \times A_3$	no	FREE	???
			FREE	???
2, 5, 6, 7	$A_1 \times A_3$	no		
2, 6, 7, 8	$A_1 \times A_3$	no	FREE	???
3, 4, 5, 7	$A_1 \times A_3$	no	FREE	???
3, 4, 5, 8	$A_1 \times A_3$	no	FREE	???
3, 5, 6, 7	$A_1 \times A_3$	no	FREE	???
3, 6, 7, 8	$A_1 \times A_3$	no	FREE	???
4, 5, 6, 8	$A_1 \times A_3$		FREE	???
		no		
4, 6, 7, 8	$A_1 \times A_3$	no	FREE	???
1, 2, 3, 4, 6	$A_1 \times A_4$	no	FREE	???
1, 2, 3, 4, 7	$A_1 \times A_4$	no	FREE	???
1, 2, 3, 4, 8	$A_1 \times A_4$	no	FREE	???
1, 2, 4, 5, 6	$A_1 \times A_4$	no	FREE	???
1, 3, 4, 5, 7	$A_1 \times A_4$	no	FREE	???
	$A_1 \times A_4$		FREE	???
1, 3, 4, 5, 8		no		
1, 4, 5, 6, 7	$A_1 \times A_4$	no	FREE	???
1, 5, 6, 7, 8	$A_1 \times A_4$	no	FREE	???
2, 4, 5, 6, 8	$A_1 \times A_4$	no	FREE	???
2, 5, 6, 7, 8	$A_1 \times A_4$	no	FREE	???
3, 4, 5, 6, 8	$A_1 \times A_4$	no	FREE	???
3, 5, 6, 7, 8	$A_1 \times A_4$		FREE	???
		no		
1, 2, 4, 5, 6, 7	$A_1 \times A_5$	no	FREE	???
1, 3, 4, 5, 6, 8	$A_1 \times A_5$	no	FREE	???
1, 4, 5, 6, 7, 8	$A_1 \times A_5$	no	FREE	???
1, 2, 4, 5, 6, 7, 8	$A_1 \times A_6$	no	FREE	???
2, 3, 4, 5, 7	$A_1 \times D_4$	no	no	(???)
2, 3, 4, 5, 8	$A_1 \times D_4$	no	no	(???)
2,0,4,0,0	$D_1 \wedge D_4$	110	110	()

1, 2, 3, 4, 5, 7	$A_1 \times D_5$	no	no	(???)
1, 2, 3, 4, 5, 7 1, 2, 3, 4, 5, 8	$A_1 \times D_5$ $A_1 \times D_5$	no no	no no	(???)
2, 3, 4, 5, 6, 8	$A_1 \times D_5$ $A_1 \times D_5$	no	no	(???)
1, 2, 3, 4, 5, 6, 8	$A_1 \times E_6$	no	FREE	???
1, 3, 5, 6	$A_1 \times A_2$ $A_2 \times A_2$	no	FREE	???
1, 3, 6, 7	$A_2 \times A_2$	no	FREE	???
1, 3, 7, 8	$A_2 \times A_2$ $A_2 \times A_2$	no	FREE	???
2, 4, 6, 7	$A_2 \times A_2$ $A_2 \times A_2$	no	FREE	???
2, 4, 7, 8	$A_2 \times A_2$ $A_2 \times A_2$		FREE	???
3, 4, 6, 7	$A_2 \times A_2$ $A_2 \times A_2$	no	FREE	???
3, 4, 7, 8	$A_2 \times A_2$ $A_2 \times A_2$	no	FREE	???
4, 5, 7, 8	$A_2 \times A_2$ $A_2 \times A_2$	no	FREE	???
1, 3, 4, 6, 7	$A_2 \times A_2$ $A_2 \times A_3$	no	FREE	???
	$A_2 \times A_3$ $A_2 \times A_3$	no	FREE	???
1, 3, 4, 7, 8		no		???
1, 3, 5, 6, 7	$A_2 \times A_3$	no	FREE	???
1, 3, 6, 7, 8	$A_2 \times A_3$	no	FREE	???
2, 3, 4, 6, 7	$A_2 \times A_3$	no	FREE	
2, 3, 4, 7, 8	$A_2 \times A_3$	no	FREE	???
2, 4, 5, 7, 8	$A_2 \times A_3$	no	FREE	???
2, 4, 6, 7, 8	$A_2 \times A_3$	no	FREE	???
3, 4, 5, 7, 8	$A_2 \times A_3$	no	FREE	???
3, 4, 6, 7, 8	$A_2 \times A_3$	no	FREE	???
1, 2, 3, 4, 6, 7	$A_2 \times A_4$	no	FREE	???
1, 2, 3, 4, 7, 8	$A_2 \times A_4$	no	FREE	???
1, 3, 4, 5, 7, 8	$A_2 \times A_4$	no	FREE	???
1, 3, 5, 6, 7, 8	$A_2 \times A_4$	no	FREE	???
2, 3, 4, 5, 7, 8	$A_2 \times D_4$	no	no	(???)
1, 2, 3, 4, 5, 7, 8	$A_2 \times D_5$	no	no	(???)
1, 3, 4, 6, 7, 8	$A_3 \times A_3$	no	FREE	???
2, 3, 4, 6, 7, 8	$A_3 \times A_3$	no	FREE	???
1, 2, 3, 4, 6, 7, 8	$A_3 \times A_4$	no	FREE	???
1, 2, 5	$A_1 \times A_1 \times A_1$	no	FREE	???
1, 2, 6	$A_1 \times A_1 \times A_1$	no	FREE	???
1, 2, 7	$A_1 \times A_1 \times A_1$	no	FREE	???
1, 2, 8	$A_1 \times A_1 \times A_1$	no	FREE	???
1, 4, 6	$A_1 \times A_1 \times A_1$	no	FREE	???
1, 4, 7	$A_1 \times A_1 \times A_1$	no	FREE	???
1, 4, 8	$A_1 \times A_1 \times A_1$	no	FREE	???
1, 5, 7	$A_1 \times A_1 \times A_1$	no	FREE	???
1, 5, 8	$A_1 \times A_1 \times A_1$	no	FREE	???
1, 6, 8	$A_1 \times A_1 \times A_1$	no	FREE	???
2, 3, 5	$A_1 \times A_1 \times A_1$	no	FREE	???
2, 3, 6	$A_1 \times A_1 \times A_1$	no	FREE	???
2, 3, 7	$A_1 \times A_1 \times A_1$	no	FREE	???
2, 3, 8	$A_1 \times A_1 \times A_1$	no	FREE	???
2, 5, 7	$A_1 \times A_1 \times A_1$	no	FREE	???

2, 5, 8	$A_1 \times A_1 \times A_1$	no	FREE	???
2, 6, 8	$A_1 \times A_1 \times A_1$	no	FREE	???
3, 5, 7	$A_1 \times A_1 \times A_1$	no	FREE	???
3, 5, 8	$A_1 \times A_1 \times A_1$	no	FREE	???
3, 6, 8	$A_1 \times A_1 \times A_1$	no	FREE	???
4, 6, 8	$A_1 \times A_1 \times A_1$	no	FREE	???
1, 2, 3, 5	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 3, 6 $1, 2, 3, 6$	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 3, 0 $1, 2, 3, 7$	$A_1 \times A_1 \times A_2$ $A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 3, 7 $1, 2, 3, 8$	$A_1 \times A_1 \times A_2$ $A_1 \times A_1 \times A_2$		FREE	???
		no	FREE	???
1, 2, 4, 6	$A_1 \times A_1 \times A_2$	no		???
1, 2, 4, 7	$A_1 \times A_1 \times A_2$	no	FREE	
1, 2, 4, 8	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 5, 6	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 6, 7	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 7, 8	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 3, 5, 7	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 3, 5, 8	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 3, 6, 8	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 4, 5, 7	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 4, 5, 8	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 4, 6, 7	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 4, 7, 8	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 5, 6, 8	$A_1 \times A_1 \times A_2$	no	FREE	???
1, 5, 7, 8	$A_1 \times A_1 \times A_2$	no	FREE	???
2, 3, 5, 6	$A_1 \times A_1 \times A_2$	no	FREE	???
2, 3, 6, 7	$A_1 \times A_1 \times A_2$	no	FREE	???
2, 3, 7, 8	$A_1 \times A_1 \times A_2$	no	FREE	???
2, 4, 6, 8	$A_1 \times A_1 \times A_2$	no	FREE	???
2, 5, 6, 8	$A_1 \times A_1 \times A_2$ $A_1 \times A_1 \times A_2$	no	FREE	???
2, 5, 7, 8	$A_1 \times A_1 \times A_2$ $A_1 \times A_1 \times A_2$	no	FREE	???
3, 4, 6, 8	$A_1 \times A_1 \times A_2$ $A_1 \times A_1 \times A_2$		FREE	???
3, 5, 6, 8	$A_1 \times A_1 \times A_2$ $A_1 \times A_1 \times A_2$	no	FREE	???
		no	FREE	???
3, 5, 7, 8	$A_1 \times A_1 \times A_2$	no		???
1, 2, 4, 5, 7	$A_1 \times A_1 \times A_3$	no	FREE	
1, 2, 4, 5, 8	$A_1 \times A_1 \times A_3$	no	FREE	???
1, 2, 5, 6, 7	$A_1 \times A_1 \times A_3$	no	FREE	???
1, 2, 6, 7, 8	$A_1 \times A_1 \times A_3$	no	FREE	???
1, 3, 4, 6, 8	$A_1 \times A_1 \times A_3$	no	FREE	???
1, 4, 5, 6, 8	$A_1 \times A_1 \times A_3$	no	FREE	???
1, 4, 6, 7, 8	$A_1 \times A_1 \times A_3$	no	FREE	???
2, 3, 4, 6, 8	$A_1 \times A_1 \times A_3$	no	FREE	???
2, 3, 5, 6, 7	$A_1 \times A_1 \times A_3$	no	FREE	???
2, 3, 6, 7, 8	$A_1 \times A_1 \times A_3$	no	FREE	???
1, 2, 3, 4, 6, 8	$A_1 \times A_1 \times A_4$	no	FREE	???
1, 2, 4, 5, 6, 8	$A_1 \times A_1 \times A_4$	no	FREE	???

1, 2, 5, 6, 7, 8	$A_1 \times A_1 \times A_4$	no	FREE	???
2, 3, 5, 6, 7, 8	$A_1 \times A_1 \times A_4$	no	FREE	???
1, 2, 3, 5, 6	$A_1 \times A_2 \times A_2$	no	FREE	???
1, 2, 3, 6, 7	$A_1 \times A_2 \times A_2$	no	FREE	???
1, 2, 3, 7, 8	$A_1 \times A_2 \times A_2$	no	FREE	???
1, 2, 4, 6, 7	$A_1 \times A_2 \times A_2$	no	FREE	???
1, 2, 4, 7, 8	$A_1 \times A_2 \times A_2$	no	FREE	???
1, 3, 5, 6, 8	$A_1 \times A_2 \times A_2$	no	FREE	???
1, 3, 5, 7, 8	$A_1 \times A_2 \times A_2$	no	FREE	???
1, 4, 5, 7, 8	$A_1 \times A_2 \times A_2$	no	FREE	???
1, 2, 3, 5, 6, 7	$A_1 \times A_2 \times A_3$	no	FREE	???
1, 2, 3, 6, 7, 8	$A_1 \times A_2 \times A_3$	no	FREE	???
1, 2, 4, 5, 7, 8	$A_1 \times A_2 \times A_3$	no	FREE	???
1, 2, 4, 6, 7, 8	$A_1 \times A_2 \times A_3$	no	FREE	???
1, 2, 3, 5, 6, 7, 8	$A_1 \times A_2 \times A_4$	no	FREE	???
1, 2, 5, 7	$A_1 \times A_1 \times A_1 \times A_1$	no	FREE	???
1, 2, 5, 8	$A_1 \times A_1 \times A_1 \times A_1$	no	FREE	???
1, 2, 6, 8	$A_1 \times A_1 \times A_1 \times A_1$	no	FREE	???
1, 4, 6, 8	$A_1 \times A_1 \times A_1 \times A_1$	no	FREE	???
2, 3, 5, 7	$A_1 \times A_1 \times A_1 \times A_1$	no	FREE	???
2, 3, 5, 8	$A_1 \times A_1 \times A_1 \times A_1$	no	FREE	???
2, 3, 6, 8	$A_1 \times A_1 \times A_1 \times A_1$	no	FREE	???
1, 2, 3, 5, 7	$A_1 \times A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 3, 5, 8	$A_1 \times A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 3, 6, 8	$A_1 \times A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 4, 6, 8	$A_1 \times A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 5, 6, 8	$A_1 \times A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 5, 7, 8	$A_1 \times A_1 \times A_1 \times A_2$	no	FREE	???
2, 3, 5, 6, 8	$A_1 \times A_1 \times A_1 \times A_2$	no	FREE	???
2, 3, 5, 7, 8	$A_1 \times A_1 \times A_1 \times A_2$	no	FREE	???
1, 2, 3, 5, 6, 8	$A_1 \times A_1 \times A_2 \times A_2$	no	FREE	???
1, 2, 3, 5, 7, 8	$A_1 \times A_1 \times A_2 \times A_2$	no	FREE	???