

$\lambda \backslash \mu$	4	1+3	2+2	1+1+2	1+1+1+1
4	1	1	1	1	1
1+3	1	2	2	3	4
2+2	1	2	3	4	6
1+1+2	1	3	4	7	12
1+1+1+1	1	4	6	12	24

$$d_{\lambda\mu} = \dim \text{Hom}(\mathbb{C}[x_\lambda], \mathbb{C}[x_\mu])$$

$\lambda \backslash \mu$	4	1+3	2+2	1+1+2	1+1+1+1
4	1	0	0	0	0
1+3	1	1	0	0	0
2+2	1	1	1	0	0
1+1+2	1	2	1	1	0
1+1+1+1	1	3	2	3	1

$$m_{\mu\lambda} = \text{mult. of } V_{\mu} \text{ in } \mathbb{C}[x_2]$$

$\lambda \backslash \mu$	4	1+3	2+2	1+1+2	1+1+1+1
4	1	0	0	0	0
1+3	1	1	0	0	0
2+2	1	0	2	0	0
1+1+2	1	2	2	2	0
1+1+1+1	1	4	6	12	24

w_2 : element of S_n of cycle decomposition 2
 $\text{tr}(w_2; \mathbb{C}[X_\mu]) = \text{no. of fixed points for}$
 the action of w_2 on X_μ

Character table of S_4

(38)

$\lambda \backslash \mu$	4	1+3	2+2	1+1+2	1+1+1+1
4 (6)	1	-1	0	1	-1
(8) 1+3	1	0	-1	0	1
(3) 2+2	1	-1	2	-1	1
(6) 1+1+2	1	1	0	-1	-1
(1) 1+1+1+1	1	3	2	3	1

$$\text{tr}(\omega_\lambda; V_\mu)$$