Ordinary character table of $G \cong C10 \times S3$:

		$egin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)^{4} - E(5)^{4}$ $E(5)^{3} - E(5)^{3}$ $E(5)^{2} - E(5)^{2}$ $E(5) - E(5)$	$ \begin{array}{cccc} -1 & & & & & & & \\ -1 & & & & & & & \\ -1 & & & & & & & \\ -1 & & & & & & & \\ -1 & & & & & & & \\ & & & & & & & \\ \end{array} $	$E(5)^{4} E(5)^{4} E(5)^{5} E(5)^{5} E(5)^{2} E(5)^{2} E(5)^{2} E(5)^{2} E(5)^{2} E(5)^{3} E(5)^{4} E(5)^{4} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$-E(5)^3$ $-E(5)^4$ $-E(5)^4$ $-E(5)^2$ $-E(5)^2$ $-E(5)^2$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)^3$ $E(5)^3$ E(5) $E(5)E(5)^4 E(5)^4E(5)^2 E(5)^2$	$ \begin{array}{cccc} -E(5)^2 & -E \\ -E(5)^4 & -E \\ -E(5) & -E \\ -E(5)^3 & -E \end{array} $	$E(5)^2$ $-E(5)$ $E(5)^4$ $-E(5)$ E(5) $-E(5)E(5)^3 -E(5)$	$E(5)$ $E(5)^2$ $E(5)^3$ $E(5)^4$ $E(5)^4$	$E(5)^2$ $E(5)^4$ $E(5)$ $E(5)$ $E(5)$ $E(5)$ $E(5)^3$ $E(5)$	$\begin{array}{ccc} & & & & & & & \\ & & & & & & & \\ & & & &$	$-E(5)$ - $-E(5)^2$ - $-E(5)^3$ - $-E(5)^4$ -	$ \begin{array}{ccc} -1 & & & & & \\ E(5)^2 & E(5) & & & & \\ -E(5)^4 & E(5)^2 & & & & \\ -E(5) & E(5)^3 & E(5)^4 \end{array} $	$E(5)$ - $E(5)^2$ - $E(5)^3$ - $E(5)^4$ -	$E(5)$ $E(5)^{2}$ $E(5)^{3}$ $E(5)^{4}$		
		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$egin{array}{ccccc} -1 & 1 & E(5)^4 \ -1 & 1 & E(5)^3 \ -1 & 1 & E(5)^2 \ \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)^4$ $E(5)^4$ $E(5)^3$ $E(5)^3$ $E(5)^2$ $E(5)^2$	$ \begin{array}{ccc} 1 & E(5)^3 \\ 1 & E(5) \\ 1 & E(5)^4 \end{array} $	$E(5)^4 - E(5)^2$ $E(5)^3 - E(5)^2$ $E(5)^2 - E(5)^2$	$(-E(5)^3)^3 - E(5)$ $(-E(5)^4)^2 - E(5)^4$	$E(5)^3$ $E(5)^4$ $E(5)$ $E(5)^3$ $E(5)^4$ $E(5)^2$	$E(5)^2 E(5)^4 E(5) E(5)$	$E(5)^3 - E(5)^3$ E(5) - E(5) $E(5)^4 - E(5)^4$	$-E(5)^{2}$ E $-E(5)^{4}$ E -E(5) F	$E(5)^2$ $E(5)^3$ $E(5)^4$ $E(5)$ $E(5)^4$	$E(5)$ $E(5)^2$ $E(5)^3$	$E(5)^2 - E(5)^4 - E(5) - E(5)$	$5)^2$ $-E(5)$ $(5)^4$ $-E(5)^2$ $E(5)$ $-E(5)^3$	$E(5)$ $E(5)^2$ $E(5)^3$	$E(5)^2$ $E(5)$ $E(5)^4$ $E(5)^2$ $E(5)$ $E(5)^3$	$-E(5)$ $E(5)^{2}$ $E(5)^{3}$	$\begin{array}{c c} \Xi(5) \\ \Xi(5)^2 \\ E(5)^3 \end{array}$		
		$\begin{bmatrix} \chi_{11} \\ \chi_{12} \end{bmatrix} = \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)$ $E(5)$ $E(5)^4$ $-E(5)^4$	$ \begin{array}{ccc} 1 & E(5)^{2} \\ -1 & E(5)^{3} \end{array} $	E(5) $E(5)$ $-E(5)$	$E(5) - E(5)^2$ $E(5)^3 - E(5)^3$	$E(5)^2$ $E(5)^3$ $-E(5)^4$	$E(5)^3$ $E(5)^2$ $E(5)^2$	$E(5)^2 - E(5)^2$ $E(5)^3 - E(5)^3$	$-E(5)^3$ $E(5)^2$ $-E(5)^2$	$E(5)^3 E(5)^2 -E(5)$	$E(5)^4$ $E(5)^4$	$E(5)^3 - E(5)^2 - E(5)^2$	$(5)^3 - E(5)^4$ $(5)^2 - E(5)$	$E(5)^4$ $E(5)^4$	$E(5)^3$ $E(5)^4$ $E(5)^2$ $E(5)$	$-E(5)^4$ F	$\mathcal{Z}(5)^4$		
		$\begin{bmatrix} \chi_{13} & 1 & 1 \\ \chi_{14} & 1 & 1 \end{bmatrix}$	$\begin{array}{cccc} 1 & E(5) \\ 1 & -1 & E(5)^3 \\ & & & & & & & & & & & & & & & & & & $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)^3 - E(5)^3$	-1 $E(5)$	$E(5)^3 - E(5)^3$	E(5) $E(5)$ -	$-E(5)$ $-E(5)^{3}$	$\frac{E(5)^4}{2}$ $\frac{E(5)^4}{2}$ $\frac{E(5)^4}{2}$	$E(5) \qquad E(5) \qquad E(5)$	$E(5)^4 - E(5)^4$	$E(5)^4 - E(5)^4$	$E(5)^2$	$E(5)^4 - E(5)^4$	$(5)^4 E(5)^2$	$-E(5)^2$ -	$-E(5)^4$ $E(5)^2$	$-E(5)^{2}$ -	$E(5)^2$		
		$\left \begin{array}{c c} \chi_{15} & 1 & 1 \\ \chi_{16} & 1 & 1 \end{array} \right $	$ \begin{array}{cccc} 1 & -1 & E(5)^2 \\ 1 & -1 & E(5) \end{array} $	$ \begin{array}{ccccc} 1 & -1 & E(\\ 1 & -1 & E \end{array} $	$E(5)^2 -E(5)^2 - E(5)$	-1 $E(5)^4$ -1 $E(5)^2$	$E(5)^2 - E(5)$ E(5) - E(5)	$E(5)^4 - E(5)^4 - E(5)^2 - E(5)^2 - E(5)^4 - E$	$-E(5)^4 - E(5)^2 - E(5)^2$	$E(5) E(5)$ E $E(5)^3 E(5)^3 E(5)^3 E(5)^3 E(5)^3 E(5)^4 E(5$	$E(5)^4 - E(5)^4$ $E(5)^2 - E(5)^2$	$E(5) - E(5)^3 - E(5)^3$	$E(5) -E(5) E(5)^3 -E(5)$	$E(5)^3$ $E(5)^4$	$E(5) - E(5)^3 - E(6)$	(5) $E(5)^3$ $(5)^4$	$-E(5)^{3}$ - $-E(5)^{4}$ -	$-E(5)$ $E(5)^3$ $-E(5)^4$	$-E(5)^{3} - I$ $-E(5)^{4} - I$	$E(5)^{3}$ - $E(5)^{4}$		
		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1 1 $E(5)^4$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)^4$ $E(5)^4$	1 $E(5)^3$	$E(5)^4$ $E(5)^4$	$\frac{4}{3}$ $E(5)^3$ $E(5)$	$E(5)^3$ $E(5)^4$	$E(5)^2$ $E(5)^4$	$E(5)^3$ $E(5)^3$	$E(5)^2$ $E(5)^4$ $E(5)^4$	$E(5)^2$ $E(5)^3$	E(5)	$E(5)^2$ $E(5)^4$ $E(5)^4$	$E(5)^2$ $E(5)^2$	E(5) I	$E(5)^2$ $E(5)$	E(5) I	E(5)		
		$\left \begin{array}{c c} \chi_{18} & 1 & 1 \\ \chi_{19} & 1 & 1 \end{array}\right $	$E(5)^2$	1 1 E($E(5)^2$ $E(5)^2$	$E(5)^4$	$E(5)^2$ $E(5)^2$	$E(5)^4$	$E(5)^4$ $E(5)^2$	E(5) $E(5)$	$E(5)^4 E(5)^4$	E(5) E	$E(5)$ $E(5)^4$	$E(5)^3$	E(5) $E(5)$ $E(5)$	(5) $E(5)^3$	$E(5)^3$	$E(5)$ $E(5)^3$	$E(5)^3$ $E(5)^3$	$\mathbb{E}(5)^3$		
		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccc} 1 & 1 & E \\ -1 & 0 & \end{array}$	E(5) $E(5)$ -2	$ \begin{array}{ccc} 1 & E(5)^2 \\ 1 & 2 \end{array} $	E(5) $E(5)$ -1 0	$E(5)^2$ 1	$E(5)^2$ $E(5)$ -2 1	$E(5)^3$ $E(5)^3$	$E(5)^2$ $E(5)^2$ -1 0	$E(5)^3$ E	$E(5)^3$ $E(5)^2$ -2 1	$E(5)^4$	$E(5)^3$ $E(5)$	$E(5)^4$	$E(5)^4$ I -2	$E(5)^3$ $E(5)^4$ 1 -1	$E(5)^4$ $E(5)^4$	$\frac{5(5)^4}{1}$		
		$\left \begin{array}{c c} \chi_{21} & 2 & 0 \\ \chi_{22} & 2 & 0 \end{array}\right $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-1 0	0 2	-1 $\frac{2}{2}$	-1 0	0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\frac{2}{2}$	-1 0	0	$\begin{bmatrix} 2 & -1 \\ -1 & -1 \end{bmatrix}$	2	-1 0	, 0	2	-1 -1	0	-1 -(v)		
		$\left \begin{array}{c c} \chi_{23} & 2 & 0 \\ \chi_{24} & 2 & 0 \end{array}\right $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ccc} -1 & 0 \\ -1 & 0 \end{array} $	$ \begin{array}{rrr} 0 & -2 * E(5)^4 \\ 0 & -2 * E(5)^3 \end{array} $	$ \begin{array}{ccc} 1 & 2 * E(5)^{3} \\ 1 & 2 * E(5) \end{array} $	$-E(5)^4$ 0 $-E(5)^3$ 0	$ \begin{array}{ccc} 0 & -2 \\ 0 & -2 \end{array} $	$2 * E(5)^3$ $E(5)^4$ $2 * E(5)$ $E(5)^3$	$2*E(5)^2 - R$ $2*E(5)^4 - R$	$E(5)^3 = 0$ - $E(5) = 0$	$ \begin{array}{ccc} 0 & -2 * \\ 0 & -2 * \end{array} $	$E(5)^{2} E(5)^{3}$ $E(5)^{4} E(5)$	2*E(5) $2*E(5)^2$	$-E(5)^2$ 0 - $E(5)^4$ 0))	$-2 * E(5)$ I $-2 * E(5)^2$	$E(5)^2 - E(5)$ $E(5)^4 - E(5)^2$	$\begin{array}{ccc} & 0 & I \\ 2 & 0 & I \end{array}$	$E(5)$ $E(5)^2$		
		$\left \begin{array}{c c} \chi_{25} \\ \chi_{25} \end{array}\right = 2$	$-2 2 * E(5)^2$	-1 0	$0 -2 * E(5)^2$	1 $2*E(5)^4$	$-E(5)^2$ 0	0 - 2	$2 * E(5)^4 E(5)^2$	2*E(5) -1	$E(5)^4 = 0$	$0 \qquad -2 > 0$	$*E(5)$ $E(5)^4$	$2*E(5)^3$	-E(5) = 0	0	$-2*E(5)^3$	$E(5) - E(5)^3$	0 F	$\mathcal{Z}(5)^3$		
		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ccc} -1 & 0 \\ -1 & 0 \end{array} $	$0 -2 * E(5) 0 2 * E(5)^4$	$ \begin{array}{ccc} 1 & 2 * E(5)^2 \\ -1 & 2 * E(5)^3 \end{array} $	$-E(5)$ 0 $-E(5)^4$ 0	$ \begin{array}{ccc} 0 & -2 \\ 0 & 2 \end{array} $	$2*E(5)^2$ $E(5)$ $*E(5)^3$ $-E(5)^4$	$2*E(5)^3 - E(5)^4 - E(5)^2 - E(5)^2$	$E(5)^2 = 0$ $E(5)^3 = 0$	$ \begin{array}{ccc} 0 & -2 * \\ 0 & 2 * \end{array} $	$E(5)^3 E(5)^2 E(5)^2 -E(5)$	$2*E(5)^4$ 2*E(5)	$-E(5)^3 = 0$ $-E(5)^2 = 0$))	$-2 * E(5)^4$ F 2 * E(5) -	$E(5)^3 - E(5)^4 - E(5)^4$	0 E	$-E(5)^{4}$		
		$\left \begin{array}{c c} \chi_{28} \\ \chi_{28} \end{array}\right \left \begin{array}{ccc} 2 & 0 \\ 2 & 0 \end{array}\right $	$2 2 * E(5)^3$	-1 0	0 $2*E(5)^3$	-1 2 * E(5)	$-E(5)^3$ 0	0 2	$2*E(5) - E(5)^3$	$2 * E(5)^4 - E(5)^4$	-E(5) = 0	0 2 * .	$E(5)^4$ $-E(5)$	$2*E(5)^2$	$-E(5)^4$ 0	0	$2*E(5)^2$ -	$-E(5)^4$ $-E(5)^2$	0 -	$E(5)^2$		
		7020	$2 2 * E(5)^2$ 2 2 * E(5)		0 $2 * E(5)^2$ 0 $2 * E(5)$	$-1 2 * E(5)^{2}$ $-1 2 * E(5)^{2}$	$-E(5)^2$ 0 $-E(5)$ 0	$0 \qquad 2 \approx 0$	$E(5)^{2} - E(5)^{2} \times E(5)^{2} - E(5)^{2}$	2 * E(5) - E(5) $2 * E(5)^3 - E(5)^3$	$E(5)^{2} = 0$	$ \begin{array}{ccc} 0 & 2 * \\ 0 & 2 * \end{array} $	$E(5)$ $-E(5)$ $E(5)^3$ $-E(5)$	$2*E(5)^3$ $2*E(5)^4$	-(0)) 0)	$2 * E(5)^{3} - 2 * E(5)^{4} - $	$-E(5)$ $-E(5)^{3}$ $-E(5)^{4}$	$\begin{bmatrix} 0 & -I \\ 0 & - \end{bmatrix}$	$-E(5)^{6}$ $-E(5)^{4}$		
ource character table of $G \cong C10 \times S3$ at $p = 2$:			. ,																			
sers N_i			N_1						j	N_2				N	<i>I</i> ₃			N_4			N_5	
	$\frac{}{}$ $1a$ $5a$	3a $5b$	$\frac{P_1}{15a}$ $5c$	15b	5d $15c$	15d	1a $5a$	3a $5b$	$\frac{15a}{}$	$\frac{P_2}{5c}$ 15b	5d	15c $15d$	1a $5a$	$\frac{P}{5b}$	$\frac{73}{5c}$	$-\frac{1}{5d}$ $1a$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	$\frac{P_4}{5b}$ 5c	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	1a 5a	$\frac{P_5}{5b}$ $5c$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$
$+ \chi_2 + 1 + \chi_3 + 1 + \chi_4 + 0 + \chi_5 + 0 + \chi_6 + 0 + \chi_7 + 0 + \chi_8 + 0 + \chi_9 + 0 + \chi_{10} + 0 + \chi_{11} + 0 + \chi_{12} + 0 + \chi_{13} + 0 + \chi_{14} + 0 + \chi_{15} + 0 + \chi_{16} + 0 + \chi_{17} + 0 + \chi_{18} + 0 + \chi_{19} + 0 + \chi_{20} + 0 + \chi_{21} + 0 + \chi_{22} + 0 + \chi_{23} + 0 + \chi_{24} + 0 + \chi_{25} + 0 + \chi_{26} + 0 + \chi_{27} + 0 + \chi_{28} + 0 + \chi_{29} + 0 + \chi_{29} + 0 + \chi_{21} + 0 + \chi_{21} + 0 + \chi_{22} + 0 + \chi_{23} + 0 + \chi_{24} + 0 + \chi_{25} + 0 + \chi_{26} + 0 + \chi_{27} + 0 + \chi_{28} + 0 + \chi_{29} + 0 +$	0	4 4	4 4	4	4 4	4	0 0	0 0	0 (0 0	0	0 0	0 0	0	0	0 0	0	0 0	0	0 0	0 0	0
$0\cdot\chi_{2}+0\cdot\chi_{3}+0\cdot\chi_{4}+0\cdot\chi_{5}+1\cdot\chi_{6}+0\cdot\chi_{7}+0\cdot\chi_{8}+0\cdot\chi_{9}+1\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+1\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+1\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}+0\cdot\chi_{21}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+$	_ ; ; 4	$4 4 * E(5) 4 * 4 4 * E(5)^3 4 *$	$E(5)^3 4 * E(5)^4$ = $E(5)^4 4 * E(5)^2$	4*E(5) $4*E(5)^3$	$4*E(5)^2$ $4*E(5)$ 4*E(5) $4*E(5)$	$4*E(5)^2$ $4*E(5)^2$ $4*E(5)$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0 ($\begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0	$\begin{array}{c c} 0 & 0 \\ 0 & 0 \end{array}$	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	$\frac{0}{0}$	$\begin{array}{ccc} 0 & 0 \\ 1 & 0 & 0 \end{array}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0
$\frac{\lambda_{11}}{0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 1 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$4 4 * E(5)^4 4 *$	$E(5)^2 4 * E(5)$	$4*E(5)^4$	$4*E(5)^3$ $4*E(5)^4$	$5) 4 * E(5)^3$	0 0	0 0	0 (0 0	0	0 0	0 0	0	0	0 0	0	0 0	0	0 0	0 0	0
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 1 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$4 4 * E(5)^2 4 * -2 4$	$\begin{array}{ccc} *E(5) & 4*E(5)^3 \\ -2 & 4 \end{array}$	$4*E(5)^2 -2$	$4*E(5)^4$ $4*E(5)^4$ -2	$4*E(5)^4$ -2	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0 ($egin{pmatrix} 0 & 0 \\ 0 & 0 \\ \end{pmatrix}$	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0	$\begin{bmatrix} 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \end{bmatrix}$	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0	$\begin{array}{ccc} 0 & 0 \\ 1 & 0 & 0 \end{array}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 1 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 1 \cdot \chi_{29} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0$	$(30 \mid 4 4*E(5)^2$	$-2 4 * E(5)^4 -2$	$*E(5)^2 4*E(5)$	$-2*E(5)^4$	$4*E(5)^3 -2*E(5)^4$	(5) $-2*E(5)^3$		0 0	0 (0 0	0	0 0	0 0	0	0	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0 0	0	0 0	0 0	0
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 1 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 1 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{22} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$-2 4 * E(5)^2 -2$ -2 4 * E(5) -2	$*E(5)$ $4*E(5)^3$ $4*E(5)^4$	$-2 * E(5)^2$ -2 * E(5)	$4*E(5)^{4}$ $-2*E(4*E(5)^{2}$ $-2*E(4*E(5)^{2}$ $-2*E(4*E(5)^{2}$	$(5)^3 -2 * E(5)^4$ $(5)^4 -2 * E(5)^2$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0 ($egin{pmatrix} 0 & 0 \\ 0 & 0 \\ \end{pmatrix}$	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0	$\begin{bmatrix} 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \end{bmatrix}$	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0	$\begin{array}{ccc} 0 & 0 \\ 1 & 0 & 0 \end{array}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 1 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 1 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0$	$(30 4 4*E(5)^4$	$-2 4*E(5)^3 -2$	$*E(5)^{4} 4*E(5)^{2}$	$-2*E(5)^3$	4*E(5) $-2*E($	$(5)^2 -2*E(5)$	0 0	0 0	0 (0 0	0	0 0	0 0	0	0	0 0	0	0 0	0	0 0	0 0	0
$-0\cdot\chi_{2}+1\cdot\chi_{3}+0\cdot\chi_{4}+0\cdot\chi_{5}+0\cdot\chi_{6}+0\cdot\chi_{7}+0\cdot\chi_{8}+0\cdot\chi_{9}+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}$		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)^3 = 2 * E(5)^4$	2 * E(5)	$2 \times E(5)^2 \times 2 \times E(5)$	$(5)^4 2 * E(5)^2$	$\begin{bmatrix} 2 & 2 \\ 2 & 2 * E(5)^3 \end{bmatrix}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$2 * E(5)^3 2 * E(5)^3$	$E(5)^4 2 * E(5)$	$2 \times E(5)^2 = 2 \times E(5)^2$	$\begin{array}{ccc} & 2 & 2 \\ *E(5)^4 & 2*E(5) \end{array}$	$(5)^2 \begin{vmatrix} 0 & 0 \\ 0 & 0 \end{vmatrix}$	0	0	$\begin{bmatrix} 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \end{bmatrix}$	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0	$\begin{array}{ccc} 0 & 0 \\ 1 & 0 & 0 \end{array}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 1 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0$	$(30 \mid 2 2*E(5)^4$	$2 2 * E(5)^3 2 *$	$E(5)^4 2 * E(5)^2$	$2*E(5)^3$	2*E(5) $2*E(5)$	$5)^2$ $2*E(5)$	$2 2 * E(5)^4$	$2 2 * E(5)^3$	$2*E(5)^4$ $2*E(5)^4$	$E(5)^2 = 2 * E(5)^3$		()	/_	0	0	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0 0	0	0 0	0 0	0
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 1 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0$			$E(5)^2 = 2 * E(5)$ $E(5) = 2 * E(5)^3$		$2*E(5)^3$ $2*E(5)^4$ $2*E(5)^4$	$5) 2 * E(5)^3 2 * E(5)^4$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$2 2 * E(5)^{4}$ $2 2 * E(5)^{2}$	$2*E(5)^2$ $2*E(5)$ $2*E(5)$ $2*E(5)$ $2*E(5)$ $2*E(5)$ $2*E(5)$	$E(5)$ 2 * $E(5)^4$ $E(5)^3$ 2 * $E(5)^2$	\ /	*E(5) $2*E(5)*E(5)^3 2*E(5)$	/ .	0	0	$\begin{bmatrix} 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \end{bmatrix}$	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0	$\begin{array}{ccc} 0 & 0 \\ 1 & 0 & 0 \end{array}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 1 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0$	$(30 \mid 2 2$	-1 2	-1 2	-1	$ \begin{array}{ccc} 2 & -1 \\ 2 & F(\xi)^3 & F(\xi) \end{array} $	-1	$\begin{bmatrix} 2 & 2 \\ 2 & 2 \end{bmatrix}$	-1 2 -1 2 -1 2 -1 -1 -1 -1 -1 -1 -1 -1	-1 2	$ \begin{array}{ccc} 2 & -1 \\ E(5) & E(5)^4 \end{array} $	2	-1 -1	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0 0	0	0 0	0 0	0
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 1 \cdot \chi_{29} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 1 \cdot \chi_{19} + 0 \cdot \chi_{19} + 0$	()		$E(5)^{2}$ $2*E(5)$ - $E(5)$ $2*E(5)^{3}$	$-E(5)^{2}$ $-E(5)^{2}$	$2 * E(5)^3$ - E(5) $2 * E(5)^4$ - E(5)	$(-E(5)^3)^3 - E(5)^4$	$2 \times 2 \times E(5)^{-1}$ $2 \times 2 \times E(5)$	$-1 2 * E(5)^{2}$ $-1 2 * E(5)^{2}$	$-E(5)^{2} = 2 * E(5)^{2}$ $-E(5) = 2 * E(5)^{2}$	$E(5)^3 - E(5)^2$	$2*E(5)^{3}$ - $2*E(5)^{4}$ -	-E(5) $-E(5)-E(5)^3 -E(5)$	$\begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix}$	0	0	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0	$\begin{bmatrix} 0 & 0 \\ 1 & 0 \end{bmatrix}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0$	$(30 \mid 2 2*E(5)^3$	-1 2 * E(5) -	$E(5)^3$ $2*E(5)^4$	\ /	$2*E(5)^2$ $-E(5)$ 2*E(5) $-E(5)$	$-E(5)^2$	$2 2 * E(5)^3$	-1 2 * E(5)	$-E(5)^3$ 2 * $E(5)^4$	- (°)	$2*E(5)^2 - 2*E(5) -$	$-E(5)^4$ $-E(5)$ $-E(5)^2$ $-E(5)$	/	0	0	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0 0	0	0 0	0 0	0
$\frac{0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 1 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 1 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} +$		$\frac{-1}{2} \frac{2 * E(5)^{\circ}}{2} \frac{-1}{2}$	$\frac{E(5)^4}{2}$ $2*E(5)^2$	$\frac{-E(5)^3}{2}$	$\frac{2*E(5)}{2} \frac{-E(5)}{2}$	$\frac{-E(5)}{2}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{-1}{0} \frac{2*E(5)^{\circ}}{0}$	$\frac{-E(5)^2 - 2*E}{0}$	$\frac{E(5)^2 - E(5)^3}{0}$	$\frac{2*E(5)}{0}$	$\frac{-E(5)^2 - E(5)}{0}$	$\frac{0}{2}$ $\frac{0}{2}$	2	2	$\begin{array}{c c} \hline 0 & 0 \\ \hline 2 & 0 \end{array}$	0	$\frac{0}{0}$	0	$\begin{bmatrix} 0 & 0 \\ \hline 0 & 0 \end{bmatrix}$	$\frac{0}{0}$	0
$0\cdot\chi_{2} + 0\cdot\chi_{3} + 0\cdot\chi_{4} + 0\cdot\chi_{5} + 0\cdot\chi_{6} + 0\cdot\chi_{7} + 0\cdot\chi_{8} + 0\cdot\chi_{9} + 0\cdot\chi_{10} + 0\cdot\chi_{11} + 0\cdot\chi_{12} + 0\cdot\chi_{13} + 0\cdot\chi_{14} + 0\cdot\chi_{15} + 1\cdot\chi_{16} + 0\cdot\chi_{17} + 0\cdot\chi_{18} + 0\cdot\chi_{21} + 0\cdot\chi_{22} + 0\cdot\chi_{23} + 0\cdot\chi_{24} + 0\cdot\chi_{25} + 0\cdot\chi_{26} + 0\cdot\chi_{27} + 0\cdot\chi_{28} + 0\cdot\chi_{29} + 0\cdot\chi_{10} + 0\cdot\chi_{11} + 0\cdot\chi_{11} + 0\cdot\chi_{12} + 0\cdot\chi_{13} + 0\cdot\chi_{14} + 0\cdot\chi_{15} + 1\cdot\chi_{16} + 0\cdot\chi_{17} + 0\cdot\chi_{18} + 0\cdot\chi_{19} + 0\cdot\chi_{1$		· /	$E(5)$ 2 * $E(5)^3$ $E(5)^3$ 2 * $E(5)^4$		$2*E(5)^4$ $2*E(5)^2$ $2*E(5)^2$	$(5)^3 2 * E(5)^4$	0 0	0 0	0 (0 0	0	0 0			$2 * E(5)^3 2$ $2 * E(5)^4 2$		0	0 0	0	$\begin{array}{ccc} 0 & 0 \\ 1 & 0 & 0 \end{array}$	0 0	0
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 1 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 1 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0$		\ /_	$E(5)^{4} = 2 * E(5)^{2}$ $E(5)^{4} = 2 * E(5)^{2}$		2 * E(5) $2 * E(5)$ $2 * E(5)$ $2 * E(5)$	$(2*E(5)^2)^2 = 2*E(5)^2$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0 0	0 ($0 \qquad 0$	0	$0 \qquad 0$			$2*E(5)^2 2$ $3 2*E(5)^2 2$		0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0	$\begin{bmatrix} 0 & 0 \\ 1 & 0 \end{bmatrix}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0$	$(30 2 * E(5)^2$		$\frac{E(5)^2}{2} = 2 * E(5)$	$2*E(5)^4$	$2*E(5)^3$ $2*E(5)^3$	(5) $2*E(5)^3$	0 0	0 0	0 (0 0	0	0 0			$\frac{4}{2*E(5)}$ 2		0	0 0	0	0 0	0 0	0
$\cdot 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} +$		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)$ $2*E(5)^3$	$2 * E(5)^2$	$2 * E(5)^4 2 * E(5)$	$(5)^3 2 * E(5)^4$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0 (0 0	0	$0 \qquad 0$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0			$E(5)^2$ 2 * $E(5)^3$			$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0
$+0\cdot\chi_{2}+0\cdot\chi_{3}+0\cdot\chi_{4}+0\cdot\chi_{5}+1\cdot\chi_{6}+0\cdot\chi_{7}+0\cdot\chi_{8}+0\cdot\chi_{9}+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+1\cdot\chi_{18}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{29}+0\cdot\chi_{21}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}$	$(30 2 2*E(5)^3$	2 2 * E(5) 2 *	$E(5)^3 2 * E(5)^4$	2*E(5)	$2*E(5)^2$ $2*E(5)$	$(5)^4 2 * E(5)^2$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0 0	0	0 0	0	0 0	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0	$0 \qquad 2$	$2*E(5)^3$ 2*.	$*E(5) 2*E(5)^4$	$(2*E(5)^2$	0 0	0 0	0
$-0\cdot\chi_{2}+0\cdot\chi_{3}+0\cdot\chi_{4}+1\cdot\chi_{5}+0\cdot\chi_{6}+0\cdot\chi_{7}+0\cdot\chi_{8}+0\cdot\chi_{9}+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+1\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{20}+0\cdot\chi_{21}+0\cdot\chi_{22}+0\cdot\chi_{23}+0\cdot\chi_{24}+0\cdot\chi_{25}+0\cdot\chi_{26}+0\cdot\chi_{27}+0\cdot\chi_{28}+0\cdot\chi_{29}+0\cdot\chi_{19}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$2 + 2 * E(5)^3 + 2 * 2 * E(5)^4 + 2 * E$	$E(5)^{2} = 2 * E(5)^{2}$ $E(5)^{2} = 2 * E(5)$	$2*E(5)^3$ $2*E(5)^4$	2 * E(5) $2 * E(5)2 * E(5)^3 2 * E(5)$	$5)^2$ $2 * E(5)$ $5)$ $2 * E(5)^3$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0 (0 0	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	0	I	\ /_	$E(5)^3 2 * E(5)^2$ $E(5)^4 2 * E(5)$	/ \ /_		$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0$	(30 1 1	1 1	$\frac{1}{1}$ $\frac{1}{1}$	1	1 1	1	1 1	1 1	1	1 1	1	$\frac{1}{2}$	1 1	1	1	$\frac{1}{1}$	1	$\frac{1}{1}$ $\frac{1}{1}$	1	$\frac{1}{1}$	$\frac{1}{1}$	1
	· · · · · · · · · · · · · · · · · · ·	$\begin{array}{cccc} 1 & E(5) & E(5) \\ 1 & E(5)^3 & E(5) \end{array}$	$E(5)^3$ $E(5)^4$ $E(5)^2$	$E(5) \\ E(5)^3$	$E(5)^2$ $E(5)^2$ $E(5)^2$	$\frac{E(5)^2}{E(5)}$	$\begin{array}{c cccc} & & & & & & & & & & & & & & & & & $	$ \begin{array}{ccc} 1 & E(5) \\ 1 & E(5)^3 \end{array} $	$E(5)^3$ $E(5)^4$ $E(5)^4$	$(5)^{\pm}$ $E(5)$ $(5)^2$ $E(5)^3$	$E(5)^2$ $E(5)$ $E(5)$	$E(5)^{\pm}$ $E(5)^{2}$ $E(5)$	$\begin{pmatrix} 1 & E(5) \\ 1 & E(5) \end{pmatrix}$	$E(5)$ $E(5)^3$	$\frac{E(5)^4}{E(5)^2}$	$E(5)^2 \mid 1 $ $E(5) \mid 1$	$E(5)^3$ $E(5)^4$ $E(5)^4$	$E(5)^4$ $E(5)^4$ $E(5)^2$	$E(5)^2$ $E(5)$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)$ $E(5)^4$ $E(5)^3$ $E(5)^2$	$E(5)^2$ $E(5)$
$\begin{array}{c} \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{29$	1 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)^2$ $E(5)$	$E(5)^4$	$E(5)^3$ $E(5)$	$E(5)^{3}$	$1 E(5)^2$	1 $E(5)^4$	$E(5)^2$ $E(5)^2$	$E(5)$ $E(5)^4$	$E(5)^3$	$E(5)$ $E(5)^3$	$\frac{3}{4}$ 1 $E(5)$	$E(5)^4$	E(5)	$E(5)^3$ 1	$E(5)^2$ E	$(5)^4$ $E(5)$	$E(5)^3$	$1 E(5)^2 \overline{F}$	(-)	$E(5)^3$
$0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 1 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 1 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0$	$\begin{array}{c cccc} & & & & & & & & & & & & & & & & & $	$egin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)^3$ $E(5)^4$ $E(5)^2$ $E(5)^2$ $E(5)$ $E(5)$ $E(5)$	$E(5)$ $E(5)^3$ $E(5)^4$ $E(5)^2$	$E(5)^2$ $E(5)^4$ $E(5)^2$ $E(5)^3$ $E(5)^3$ $E(5)^4$ $E(5)^3$	$ \begin{array}{ccc} & & & & 1 \\ & & & & E(5)^2 \\ & & & E(5) \\ & & & E(5)^3 \\ & & & & E(5)^4 \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	$E(5)^3$ $E(5)^4$ $E(5)^2$ $E(5)^2$ $E(5)^2$ $E(5)^2$	$\begin{array}{ccc} 1 & & & 1 \\ (5)^4 & & E(5) \\ (5)^2 & & E(5)^3 \\ (5) & & E(5)^4 \\ (5)^3 & & E(5)^2 \end{array}$	$E(5)^{2}$ $E(5)$ $E(5)^{3}$ $E(5)^{4}$	$E(5)^4$ $E(5)^2$ $E(5)$ $E(5)$ $E(5)$ $E(5)^3$ $E(5)^4$	$egin{array}{c cccc} & 1 & & 1 & & 1 & & & & & & & & & & & $	$ \begin{array}{ccc} & & & & & & & & & & & & & & & & & & & $	$E(5)^4$ $E(5)^2$ $E(5)$ $E(5)^3$	$E(5)^2$ 1 $E(5)$ 1 $E(5)^3$ 1 $E(5)^4$ 1	$E(5)^3$ E $E(5)^4$ E $E(5)^2$ E $E(5)$ E	$\begin{array}{ccc} 1 & 1 \\ 2(5) & E(5)^4 \\ 2(5)^3 & E(5)^2 \\ 2(5)^4 & E(5) \\ 2(5)^2 & E(5)^3 \end{array}$	$ \begin{array}{c c} & & & \\ & & E(5)^2 \\ & & E(5) \\ & & E(5)^3 \\ & & E(5)^4 \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	(-)	(-)

$P_1 = Group([()]) \cong 1$

- $P_3 = Group((1,2)(3,6)(4,7)(5,18)(8,13)(9,14)(10,27)(11,16)(12,30)(15,21)(17,24)(19,25)(20,39)(22,28)(23,42)(26,33)(29,36)(31,37)(32,50)(34,40)(35,52)(38,45)(41,47)(43,48)(44,57)(46,58)(49,54)(51,55)(53,60)(56,59)) \\ \cong C_2(3,42)(3,4$
- $P_4 = Group([(1,6)(2,3)(4,14)(5,27)(7,9)(8,21)(10,18)(11,25)(12,39)(13,15)(16,19)(17,33)(20,30)(22,37)(23,50)(24,26)(28,31)(29,45)(32,42)(34,48)(35,57)(36,38)(40,43)(41,54)(44,52)(46,60)(47,49)(51,59)(53,58)(55,56)]) \cong C2(1,10)(1,10$
- $P_5 = Group([(1,3)(2,6)(4,9)(5,10)(7,14)(8,15)(11,19)(12,20)(13,21)(16,25)(17,26)(18,27)(22,31)(23,32)(24,33)(28,37)(29,38)(30,39)(34,43)(35,44)(36,45)(40,48)(41,47)(43,48)(44,57)(46,58)(49,54)(51,55)(53,60)(56,59)] \cong C2 \times C2$

 $N_3 = Group([(1,2)(3,6)(4,7)(5,18)(8,13)(9,14)(10,27)(11,16)(12,30)(15,21)(17,24)(19,25)(20,39)(22,28)(23,42)(26,33)(29,36)(31,37)(32,50)(34,43)(35,44)(36,45)(40,48)(41,47)(43,48)(44,57)(46,58)(49,54)(51,55)(53,60)(56,59), (1,3)(2,3)(24,33)(28,37)(29,38)(30,39)(34,43)(35,44)(36,45)(40,48)(41,47)(43,48)(44,57)(46,58)(49,54)(51,55)(53,60)(56,59), (1,3)(2,3)(24,33)(28,37)(29,38)(30,39)(34,43)(35,44)(36,45)(40,48)(41,47)(43,48)(44,57)(46,58)(47,54)(51,56)(52,57)(55,59)(58,60), (1,4,11,22,34)(27,16,28,40)(37,48)(47,54$ $N_5 = Group([(1,2)(3,6)(4,7)(5,18)(8,13)(9,14)(10,27)(11,16)(12,30)(15,21)(17,24)(19,25)(20,39)(22,28)(23,42)(26,33)(29,36)(31,37)(32,50)(34,43)(35,44)(36,45)(40,48)(41,47)(43,48)(44,57)(46,58)(49,54)(51,55)(53,60)(56,59), (1,3)(2,3)(24,33)(28,37)(29,38)(30,39)(34,43)(35,44)(36,45)(40,48)(41,47)(43,48)(44,57)(46,58)(49,54)(51,55)(53,60)(56,59), (1,3)(2,3)(24,33)(28,37)(29,38)(30,39)(34,43)(35,44)(36,45)(40,48)(41,47)(43,48)(44,57)(46,58)(47,54)(51,56)(52,57)(55,59)(58,60), (1,4,11,22,34)(27,16,28,40)(37,48)(47,54$