$\begin{vmatrix} 0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} \end{vmatrix} 78 -6 0 -E(8) - E(8)^3$

 $\begin{vmatrix} 0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} \end{vmatrix} 78 -6 0 E(8) + E(8)^3$

 $\left| \ 0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} \ \right| \ 12 \qquad 4 \qquad 0$

 $1 \cdot \chi_1 + 1 \cdot \chi_2 + \overline{0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}} \quad 39 \quad 7 \quad 3 \quad 1$

 $\begin{vmatrix} 0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} \end{vmatrix} \ 12 \ 4 \ 0$

 $0 \cdot \chi_1 + 0 \cdot \chi_2 + 2 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} \mid 123 \quad -5 \quad 3 \quad -1$

 $\begin{vmatrix} 0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} \end{vmatrix} 13 \quad -3 \quad 1$

 $0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} = 52 \quad -4 \quad 0$

 $0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} \quad 39 \quad -1 \quad -1$

 $1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} \begin{vmatrix} 1 & 1 & 1 \end{vmatrix}$

 $\begin{vmatrix} 0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} \end{vmatrix} 39 -1 3 -1$

		$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(13) \hat{\ } 11 \qquad E(13) + E(13) \hat{\ } 3 + E(13) \hat{\ } 9 \qquad E(13) \hat{\ } 2 + E(13) \hat{\ } 5 + E(13) \hat{\ } 6 \qquad E(13) \hat{\ } 4 + E(13) \hat{\ } 10 + E(13) \hat{\ } 12 \\ - E(13) \hat{\ } 6 \qquad E(13) \hat{\ } 4 + E(13) \hat{\ } 10 + E(13) \hat{\ } 12 \qquad E(13) \hat{\ } 7 + E(13) \hat{\ } 8 + E(13) \hat{\ } 11 \qquad E(13) + E(13) \hat{\ } 3 + E(13) \hat{\ } 9 \\ E(13) \hat{\ } 9 \qquad E(13) \hat{\ } 2 + E(13) \hat{\ } 5 + E(13) \hat{\ } 6 \qquad E(13) \hat{\ } 4 + E(13) \hat{\ } 10 + E(13) \hat{\ } 12 \qquad E(13) \hat{\ } 7 + E(13) \hat{\ } 8 + E(13) \hat{\ } 11 \qquad 0 \qquad 0 \qquad 0 \\ 0 \qquad \qquad$				
Trivial source character table of $G \cong PSL(3,3)$ at $p=3$							
$Normalisers N_i$		N_1			N_2 N_3 N_4		$\frac{N_5}{}$
$p-subgroups\ of\ G\ up\ to\ conjugacy\ in\ G$		P_1			P_2 P_3 P_4		P_5
Representatives $n_j \in N_i$	13a	13b	13c	13d	1a 2a 1a 2a 2a 2a 1a 2a 2a 4a 8b	8a $1a$ $2a$ $2a$ $4a$	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 2 \cdot \chi_{12} $ $189 -3 1 3 3 3 3 3 3 3 3 $	$-E(13)^2 - E(13)^5 - E(13)^6 - E(13)^7 - E(13)^8 - E(13)^1$	$-E(13) - E(13)^3 - E(13)^3 - E(13)^9 - E(13)^10 - E(13)^12$	$-E(13)^2 - E(13)^5 - E(13)^6 - E(13)^7 - E(13)^8 - E(13)^1$	$-E(13) - E(13)^3 - E(13)^9 - E(13)^9 - E(13)^10 - E(13)^12$	0 0 0 0 0 0 0 0 0 0	0 0 0 0	0 0
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$		$E(13)^{} 4 + E(13)^{} 10 + E(13)^{} 12$	$E(13)^{}7 + E(13)^{}8 + E(13)^{}11$	$E(13) + E(13)^3 + E(13)^9$		$0 \qquad \qquad 0 0 0$	0 0
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(13)^{}7 + E(13)^{}8 + E(13)^{}11$	$E(13) + E(13)^3 + E(13)^9$	$E(13)^2 + E(13)^5 + E(13)^6$	$E(13)^{} 4 + E(13)^{} 10 + E(13)^{} 12$		0	
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(13) + E(13)^{} 2 + E(13)^{} 3 + E(13)^{} 4 + E(13)^{} 5 + E(13)^{} 6 + 2 * E(13)^{} 7 + 2 * E(13)^{} 8 + E(13)^{} 9 + E(13)^{} 10 + 2 * E(13)^{} 11 + E(13)^{} 12$	$2*E(13) + E(13)^2 + 2*E(13)^3 + E(13)^3 + E(13)^4 + E(13)^5 + E(13)^6 + E(13)^7 + E(13)^8 + 2*E(13)^9 + E(13)^1 + E(13)^1 + E(13)^1 + E(13)^1 + E(13)^2 + $	$E(13) + 2 * E(13)^{} 2 + E(13)^{} 3 + E(13)^{} 4 + 2 * E(13)^{} 5 + 2 * E(13)^{} 6 + E(13)^{} 7 + E(13)^{} 8 + E(13)^{} 9 + E(13)^{} 10 + E(13)^{} 11 + E(13)^{} 12$	$E(13) + E(13)^2 + E(13)^3 + 2 * E(13)^4 + E(13)^5 + E(13)^6 + E(13)^7 + E(13)^8 + E(13)^9 + 2 * E(13)^1 + E(13)^1 + E(13)^1 + 2 * E(13)^1 + E(13)^2 + E(13$		$0 \qquad \qquad 0 0 0$	0 0
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(13) + 2 * E(13)^2 + E(13)^3 + E(13)^3 + E(13)^4 + 2 * E(13)^5 + 2 * E(13)^6 + E(13)^7 + E(13)^8 + E(13)^9 + E(13)^1 + E(13)^1 + E(13)^1 + E(13)^2 + E(13$	$E(13) + E(13)^{} 2 + E(13)^{} 3 + 2 * E(13)^{} 4 + E(13)^{} 5 + E(13)^{} 6 + E(13)^{} 7 + E(13)^{} 8 + E(13)^{} 9 + 2 * E(13)^{} 10 + E(13)^{} 11 + 2 * E(13)^{} 12$	$E(13) + E(13)^{2} + E(13)^{3} + E(13)^{4} + E(13)^{5} + E(13)^{6} + E(13)^{6} + 2 * E(13)^{7} + 2 * E(13)^{8} + E(13)^{9} + E(13)^{10} + 2 * E(13)^{11} + E(13)^{12}$	$2*E(13) + E(13)^2 + 2*E(13)^3 + E(13)^4 + E(13)^5 + E(13)^6 + E(13)^7 + E(13)^8 + 2*E(13)^9 + E(13)^1 + E(13)^1 + E(13)^1 + E(13)^1 + E(13)^1 + E(13)^2 + $		0	0 0
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(13)^2 + E(13)^5 + E(13)^6 + E(13)^7 + E(13)^8 + E(13)^1$	$E(13) + E(13)^3 + E(13)^9 + E(13)^9 + E(13)^10 + E(13)^12$	$E(13)^2 + E(13)^5 + E(13)^6 + E(13)^7 + E(13)^8 + E(13)^1$	$E(13) + E(13)^3 + E(13)^4 + E(13)^9 + E(13)^10 + E(13)^12$		$0 \qquad \qquad 0 0 0$	
$ \begin{vmatrix} 0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} \end{vmatrix} 81 -3 -1 1 - E(8) - E(8)^3 1 + E(8) + E(8)^3 $		$E(13)^{}7 + E(13)^{}8 + E(13)^{}11$	$E(13) + E(13)^3 + E(13)^9$	$E(13)^2 + E(13)^5 + E(13)^6$		0	
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(13) + E(13)^3 + E(13)^9$	$E(13)^2 + E(13)^5 + E(13)^6$	$E(13)^{}4 + E(13)^{}10 + E(13)^{}12$	$E(13)^{}7 + E(13)^{}8 + E(13)^{}11$		0	
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$	1	1	1	1		0 0 0 0	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} $ 72 0 0 2	$-E(13)^2 - E(13)^5 - E(13)^6 - E(13)^7 - E(13)^8 - E(13)^1$	$-E(13) - E(13)^3 - E(13)^3 - E(13)^9 - E(13)^10 - E(13)^12$	$-E(13)^2 - E(13)^5 - E(13)^6 - E(13)^7 - E(13)^8 - E(13)^1$	$-E(13) - E(13)^3 - E(13)^9 - E(13)^10 - E(13)^12$	3 3 0 0 0 0 0 0 0 0 0	0 0 0 0	0 0
$ \begin{vmatrix} 0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \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} \end{vmatrix} \ \ 45 \ \ -3 \ \ 1 $	$E(13)^2 + E(13)^5 + E(13)^6 + E(13)^7 + E(13)^8 + E(13)^1$	$E(13) + E(13)^3 + E(13)^9 + E(13)^9 + E(13)^10 + E(13)^12$	$E(13)^2 + E(13)^5 + E(13)^6 + E(13)^7 + E(13)^8 + E(13)^11$	$E(13) + E(13)^3 + E(13)^4 + E(13)^9 + E(13)^10 + E(13)^12$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$0 \qquad 0 0 0$	0 0
$1 \cdot \chi_1 + 2 \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} 90 10 2 2 2 2 2 2 2 2 2 $	-1	-1	-1	-1	0 0 9 3 3 1 0 0 0 0	0 0 0 0	0 0
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$	0	0	0	0	0 0 9 -3 -3 1 0 0 0 0	$0 \qquad 0 0 0$	0 0
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(13) + 2 * E(13) ^2 + E(13) ^3 + E(13) ^3 + E(13) ^3 + 2 * E(13) ^5 + 2 * E(13) ^6 + 2 * E(13) ^7 + 2 * E(13) ^3 + E(1$	$12 2*E(13) + E(13)^2 + 2*E(13)^3 + 2*E(13)^3 + 2*E(13)^3 + E(13)^5 + E(1$	$12 E(13) + 2 * E(13)^2 2 + E(13)^3 3 + E(13)^3 4 + 2 * E(13)^5 5 + 2 * E(13)^6 6 + 2 * E(13)^7 7 + 2 * E(13)^8 + E(13)^9 + E(13)^5 10 + 2 * E(13)^5 11 + E(13$	$2 * E(13) + E(13)^2 + 2 * E(13)^3 + 2 * E(13)^3 + 2 * E(13)^3 + E(13)^5 + $	$3)^{}12 \mid 0 0 \mid 9 -3 3 -1 \mid 0 0 0 0$	$0 \qquad 0 0 0$	0 0
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$E(13) + 2 * E(13) ^2 2 + E(13) ^3 3 + E(13) ^3 4 + 2 * E(13) ^5 5 + 2 * E(13) ^6 6 + 2 * E(13) ^7 7 + 2 * E(13) ^7 8 + E(13) ^7 9 + E(13) ^7 10 + 2 * E(13) ^7 11 + E(13) ^7 12 + E(13$	$12 2*E(13) + E(13)^2 + 2*E(13)^3 + 2*E(13)^3 + 2*E(13)^3 + E(13)^3 + E(1$	$12 E(13) + 2 * E(13)^2 2 + E(13)^3 3 + E(13)^3 4 + 2 * E(13)^5 5 + 2 * E(13)^6 6 + 2 * E(13)^7 7 + 2 * E(13)^8 + E(13)^9 9 + E(13)^5 10 + 2 * E(13)^5 11 + E($	$2 * E(13) + E(13)^2 + 2 * E(13)^3 + 2 * E(13)^3 + 2 * E(13)^3 + 2 * E(13)^3 + E(13)^$		$0 \qquad 0 0 0$	0 0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} 39 7 3 1 1$	0	0	0	0	0 0 3 1 3 1 3 3 1 3 1	1 0 0 0 0	0 0
$ \begin{vmatrix} 0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \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} + 0 \cdot \chi_{12} \end{vmatrix} 39 -1 3 -1 $	0	0	0	0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-1 0 0 0 0	0 0
P(0) = P(0) + P(0) = P(0) + P(0) = P(0) + P(0) =						((a)\sigma a \ \P(\a)\sigma a \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0

 $E(13)^4 + E(13)^10 + E(13)^12 E(13)^7 + E(13)^8 + E(13)^11 E(13) + E(13)^3 + E(13)^9 E(13)^2 + E(13)^5 + E(13)^6$

 $E(13)^2 + E(13)^5 + E(13)^6 + E(13)^7 + E(13)^8 + E(13)^11$

0 0 0 0 0

0 0 0 0 0

3 1 0 0 0 0

-1 0 0 0 0 0

-1 | 1 -1 | 1 1 -1 -1

 $\begin{vmatrix} 6 & -6 & 0 & 0 & E(8) + E(8)^3 & -E(8) - E(8)^3 \end{vmatrix} \begin{vmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \end{vmatrix}$

 $\begin{bmatrix} 6 & -6 & 0 & 0 & -E(8) - E(8)^3 & E(8) + E(8)^3 & 0 & 0 & 0 & 0 \end{bmatrix}$

-1 | 4 -4 0 0 0 0 | 1 -1 | 1 -1 -1 1

 $0 \qquad | \ 4 \ -4 \ 0 \ 0 \qquad 0 \qquad 0 \qquad | \ 1 \ 1 \ | \ 1 \ -1 \ 1 \ -1 |$

 $\mid 0 \quad 0 \mid 6 \quad 0 \quad -6 \quad 0 \mid 6 \quad -6 \quad 0 \quad 0 \quad -E(8) - E(8) \hat{\ } 3 \quad E(8) + E(8) \hat{\ } 3 \quad \mid 0 \quad 0 \quad 0 \quad 0$

 $1 \qquad | 0 \quad 0 \quad 0 \quad 0$

3 3 1 3 1

 $\begin{vmatrix} 3 & 3 & -1 & 3 & -1 \end{vmatrix}$

 $\begin{vmatrix} 3 & 3 & 1 & -1 & -1 \end{vmatrix}$

 $0 \quad 0 \quad 0 \quad 0$

 $3 \quad 3 \quad -1 \quad -1$

0 1 1 -1 1 -1

 $| 0 \quad 0 \quad | \quad 3 \quad -1 \quad 3 \quad -1 \quad | \quad 3 \quad 3 \quad -1 \quad -1 \qquad 1$

 $| 1 \quad -1 \quad | \quad 4 \quad 0 \quad -4 \quad 0 \quad | \quad 4 \quad -4 \quad 0 \quad 0 \qquad 0$

 $\begin{vmatrix} 1 & -1 & 4 & -4 & 0 & 0 & 1 & 1 & -1 & 1 & -1$

0 0 3 3 -1 -1 0 0 0 0 0

0 0 6 -6 0 0 0 0 0 0

0 0 3 3 -1 -1 0 0 0 0

 $E(13) + E(13)^3 + E(13)^4 + E(13)^9 + E(13)^10 + E(13)^12$

3 1 6 0 0 2 0 0 0 0

 $\begin{vmatrix} 3 & -1 & 6 & 0 & 0 & -2 & 0 & 0 & 0 \end{vmatrix}$

1 1 1 1 1 1 1 1 1

 $|\chi_3| 13 -3 4 1 1 0$

 $|\chi_2|$ 12 4 3 0 0 1 0

 $|\chi_4| 16 0 -2 1 0 0$

 $E(13) + E(13)^3 + E(13)^4 + E(13)^9 + E(13)^10 + E(13)^12$

 $P_1 = Group([()]) \cong 1$ $P_2 = Group([(2, 11, 12)(3, 9, 5)(4, 13, 6)(7, 10, 8)]) \cong C3$

 $P_3 = Group([(2, 10, 6)(4, 11, 8)(7, 13, 12)]) \cong C3$ $P_4 = Group([(3, 9, 5)(4, 11, 8)(7, 12, 13), (2, 10, 6)(4, 11, 8)(7, 13, 12)]) \cong C3 \times C3$

Ordinary character table of $G \cong PSL(3,3)$:

 $P_5 = Group([(2,12,4)(6,13,8)(7,11,10),(2,10,6)(4,11,8)(7,13,12)]) \cong C3 \times C3$ $P_6 = Group([(2,11,7)(3,5,9)(4,12,6)(8,13,10),(2,10,6)(4,11,8)(7,13,12)]) \cong C3 \times C3$

 $P_7 = Group([(2,11,12)(3,9,5)(4,13,6)(7,10,8),(3,9,5)(4,11,8)(7,12,13),(2,6,10)(3,5,9)(4,11,8)]) \cong (C3 \times C3) : C3$

 $N_1 = Group([(2,4)(3,5)(6,8)(10,11),(1,2,3)(5,6,7)(8,9,10)(11,12,13)]) \cong PSL(3,3)$

 $N_2 = Group([(2,11,12)(3,9,5)(4,13,6)(7,10,8),(4,13)(5,9)(7,8)(11,12),(2,10,6)(4,11,8)(7,13,12)]) \cong C3 \times S3$ $N_3 = Group([(4,12)(6,10)(7,8)(11,13),(4,13)(5,9)(7,8)(11,12),(3,9,5)(4,11,8)(7,12,13),(2,10,6)(4,11,8)(7,13,12),(2,4)(6,11)(7,13)(8,10)]) \cong ((C3 \times C3) : C3) : (C2 \times C2)$

 $N_4 = Group([(4,12)(6,10)(7,8)(11,13),(3,12,11)(4,5,7)(8,9,13),(2,3)(5,6)(9,10)(12,13),(4,13)(5,9)(7,8)(11,12),(3,9,5)(4,11,8)(7,12,13),(2,10,6)(4,11,8)(7,13,12)]) \cong (((C3 \times C3) : Q8) : C3) : C2)$ $N_5 = Group([(2,12,4)(6,13,8)(7,11,10),(1,9)(4,6)(10,12)(11,13),(4,13)(5,9)(7,8)(11,12),(3,5)(6,10)(7,13)(8,11),(3,5)(4,12)(7,11)(8,13),(2,10,6)(4,11,8)(7,13,12)]) \\ \cong (((C3 \times C3) : Q8) : C3) : C3)$

 $N_6 = Group([(4,13)(5,9)(7,8)(11,12),(2,11,7)(3,5,9)(4,12,6)(8,13,10),(3,5)(4,12)(7,11)(8,13),(2,10,6)(4,11,8)(7,13,12)]) \cong ((C3 \times C3) : C3) : C3)$ $N_7 = Group([(4,12)(6,10)(7,8)(11,13),(2,11,12)(3,9,5)(4,13,6)(7,10,8),(4,13)(5,9)(7,8)(11,12),(3,9,5)(4,11,8)(7,12,13),(2,6,10)(3,5,9)(4,11,8)]) \cong ((C3 \times C3) : C3) : (C2 \times C2)$

 $E(13)^2 + E(13)^5 + E(13)^6 + E(13)^7 + E(13)^8 + E(13)^1$