| | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ |
|--|--|
| | $\chi_9 \mid 1 E(3)^2 \qquad \qquad E(3)^2 \qquad \qquad 1 \qquad \qquad 1 \qquad E(3) \qquad E(3) \qquad \qquad E(3)^2 \qquad \qquad 1$ |
| | $\left \begin{array}{cccccccccccccccccccccccccccccccccccc$ |
| | $\left \begin{array}{cccccccccccccccccccccccccccccccccccc$ |
| | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ |
| | $\left \begin{array}{cccccccccccccccccccccccccccccccccccc$ |
| | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ |
| | $\left \begin{array}{cccccccccccccccccccccccccccccccccccc$ |
| | $\chi_{16} \begin{vmatrix} 3 & 0 & E(9)^4 + 2*E(9)^7 & 0 & 3*E(3)^2 & 0 & 0 & -E(9)^2 + E(9)^5 & E(9)^4 - E(9)^7 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 \\$ |
| | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ |
| Trivial source character table of $G \cong C3$ ((C3 x C3) : C3) = (C3 x C3) (C3 x C3) at $n = 3$: | |
| Trivial source character table of $G\cong \operatorname{C3}$. ((C3 x C3) : C3) = (C3 x C3) . (C3 x C3) at $p=3$: Normalisers N_i $N_1 \mid N_2 \mid N_3 \mid N_4 \mid N_5 \mid N_6 \mid N_7 \mid N_8 \mid N_9 \mid N_{10} \mid N_{11} \mid N_{12} \mid N_{13}$ | |
| | |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | |
| $\frac{1}{1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 3 \cdot \chi_{10} + 3 \cdot \chi_{11} + 3 \cdot \chi_{12} + 3 \cdot \chi_{13} + 3 \cdot \chi_{14} + 3 \cdot \chi_{15} + 3 \cdot \chi_{16} + 3 \cdot \chi_{17} + 81 0 0 0 0 0 0 0 0 0 $ | |
| $\frac{1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 3 \cdot \chi_{10} + 3 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{17} + 27 + 27 + 27 + 27 + 27 + 27 + 27 + $ | |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 1 \cdot \chi_{17} + 27 \begin{vmatrix} 0 & 9 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0$ | |
| $1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 9 + 9 + 9 + 0 + 0 + 0 + 0 + 0 + 0 + 0$ | |
| $1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 9 + 9 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0$ | |
| $\boxed{1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} 9 9 0 0 0 0 0 0 0 0$ | |
| $\boxed{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} 9 9 0 0 0 0 0 0 0 0$ | |
| $\boxed{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} 9 9 0 0 0 3 0 0 0 0}$ | |
| $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} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} \begin{vmatrix} 3 & 3 & 3 & 3 & 3 & 3 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 3 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 $ | |
| $1 \cdot \chi_1 + 1 \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} \begin{vmatrix} 3 & 3 & 3 & 3 & 0 & 3 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 3 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 $ | |
| $1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \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} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} \begin{vmatrix} 3 & 3 & 3 & 3 & 0 & 0 & 3 & 0 & 0 \\ 3 & 0 & 0 & 3 & 0 & 0 & 3 & 0 & 0 \\ 3 & 0 & 0 & 0 & 3 & 0 & 0 & 3 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 3 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 3 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ 4 & 0 & 0 $ | |
| $\boxed{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} 3 3 3 0 0 3 0 3 0}$ | |
| $\boxed{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} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} \mid 1 \mid $ | |
| | |
| | |
| $P_1 = Group([()]) \cong 1$ | |
| $P_2 = Group([(1,5,15)(2,9,24)(3,12,29)(4,14,31)(6,18,37)(7,21,42)(8,23,44)(10,26,47)(11,28,49)(13,30,50)(16,34,55)(17,36,57)(19,39,60)(20,41,62)(22,43,63)(25,46,65)(27,48,66)(32,52,69)(33,54,71)(35,56,72)(38,59,74)(40,61,75)(45,64,76)(51,68,78)(53,70,79)(58,73,80)(67,77,81)]) \cong C3$ | |
| $P_3 = Group([(1,13,4)(2,22,8)(3,27,11)(5,30,14)(6,35,17)(7,40,20)(9,43,23)(10,45,25)(12,48,28)(15,50,31)(16,53,33)(18,56,36)(19,58,38)(21,61,41)(24,63,44)(26,64,46)(29,66,49)(32,67,51)(34,70,54)(37,72,57)(39,73,59)(42,75,62)(47,76,65)(52,77,68)(55,79,71)(60,80,74)(69,81,78)]) \cong C3$ | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |
| $P_4 = Group([(1,13,4)(2,22,8)(3,27,11)(5,30,14)(6,35,17)(7,40,20)(9,43,23)(10,45,25)(12,48,28)(15,50,31)(16,53,33)(18,56,36)(19,58,38)(21,61,41)(24,63,44)(26,64,46)(29,66,49)(32,67,51)(34,70,54)(37,72,57)(39,73,59)(42,75,62)(47,76,65)(52,77,68)(55,79,71)(60,80,74)(69,81,78), (1,5,15)(2,9,24)(3,12,29)(4,14,31)(6,18,37)(7,21,42)(19,12)($ | $(3, 23, 44)(10, 26, 47)(11, 28, 49)(13, 30, 50)(16, 34, 55)(17, 36, 57)(19, 39, 60)(20, 41, 62)(22, 43, 63)(25, 46, 65)(27, 48, 66)(32, 52, 69)(33, 54, 71)(35, 56, 72)(38, 59, 74)(40, 61, 75)(45, 64, 76)(51, 68, 78)(53, 70, 79)(58, 73, 80)(67, 77, 81)) \cong C3 \times C3$ |

5 = Group([(1,3,10,15,29,47,5,12,26)(2,7,19,24,42,60,9,21,39)(4,11,25,31,49,65,14,28,46)(22,43,63)(25,46,65)(27,48,66)(22,43,53)(67,72,79,81,56,72)(38,59,74)(40,61,75)(45,64,76)(22,43,63)(25,46,65)(27,48,66)(22,43,63)(25,46,65)(27,48,66)(22,43,63)(25,46,65)(27,48,66)(22,43,63)(25,46,65)(27,48,66)(22,43,63)(25,46,65)(27,48,66)(22,43,63)(25,46,65)(27,48,66)(22,43,63)(25,46,65)(27,48,66)(22,43,63)(25,46,65)(27,48,66)(27,48, $G_6 = Group([(1,2,6,5,9,18,15,24,37)(3,20,70,12,41,79,29,62,53)(4,23,57,14,44,17,31,8,36)(7,33,66,21,54,27,42,71,48)(10,58,78,26,73,51,47,80,68)(11,61,62,87,74)(10,58,78,26,73,51,47,80,68)(11,61,62,87,74)(10,58,78,26,73,51,47,80,68)(11,61,62,87,74)(10,58,78,26,73,51,47,80,68)(11,61,62,87,74)(10,58,78,26,73,51,47,80,68)(11,61,62,87,74)(10,58,78,26,73,51,47,80,68)(11,61,62,87,74)(10,58,78,26,73,51,47,80,68)(11,61,62,87,74)(10,58,78,26,73,51,47,80,68)(11,61,62,87,74)(10,58,78,26,74)(10,58,7$ $7_7 = Group([(1,20,52,5,41,69,15,62,32)(2,33,47,9,54,10,24,71,26)(3,58,56,12,73,72,29,80,35)(4,61,51,14,75,68,31,40,78)(6,28,50,14,43,10)(6,18,37)(7,21,42)(8,23,44)(10,26,47)(11,28,49)(13,30,50)(16,34,55)(17,36,57)(19,39,60)(20,41,62)(22,43,63)(25,46,65)(27,48,66)(22,43,63)(25,46,65)(27,48,66)(22,43,63)(25,46,65)(27,48,66)(22,43,63)(25,46,65)(27,48,66)$

= Group([(1,13,4)(2,22,8)(3,27,11)(5,30,14)(6,35,77,257)(39,73,59)(42,75,62)(47,76,65)(27,48,66)(27,48,6

1 $E(3)^2 E(3)^2$

1 1 E(3) 1 $E(3)^2$

 $\chi_{11} \mid 3 \quad 0 \quad 0 \quad 3*E(3) \quad 3 \quad 0 \quad 0 \quad 0 \quad 3*E(3)^2 \quad 3 \quad 0 \quad 0$

0 3*E(3) 3 0 0

 $\chi_{12} = 3$ 0 $2 \times E(9)^2 + E(9)^5$ 0 $3 \times E(3)$ 0 $E(9)^4 - E(9)^7$ $-E(9)^2 + E(9)^5$ 0 $3 \times E(3)^2$ 0 $E(9)^4 + 2 \times E(9)^7$ $-E(9)^2 - 2 \times E(9)^5$ 0 $-2 \times E(9)^4 - E(9)^7$ χ_{13} | 3 | 0 | $-E(9)^2 + E(9)^5$ | 0 | 3 * E(3) | 0 | 0 | $-2*E(9)^4 - E(9)^7$ | $-E(9)^2 - 2*E(9)^5$ | 0 | 3 * E(3) | 0 | 0 | $-E(9)^4 - E(9)^7$ | 2 * E(9) | 2 * E(9) | 5 | 0 | $-E(9)^4 - E(9)^7$ | 0 | $-E(9)^4 - E$ $\chi_{15} \mid 3 \quad 0 \quad E(9)^4 - E(9)^7 \quad 0 \quad 3*E(3)^2 \quad 0 \quad 0 \quad -E(9)^2 - 2*E(9)^5 \quad -2*E(9)^4 - E(9)^7 \quad 0 \quad 3*E(3) \quad 0 \quad 0 \quad -E(9)^2 + E(9)^5 \quad E(9)^4 + 2*E(9)^7 \quad 0 \quad 2*E(9)^2 + E(9)^5 \quad -2*E(9)^4 - E(9)^7 \quad 0 \quad -2*E(9)^4$ $\chi_{17} \begin{vmatrix} 3 & 0 & -2*E(9)^4 - E(9)^7 & 0 & 3*E(3)^2 & 0 & 0 & 2*E(9)^2 + E(9)^5 & E(9)^4 + 2*E(9)^7 & 0 & 3*E(3) & 0 & 0 & -E(9)^2 - 2*E(9)^5 & E(9)^4 - E(9)^7 & 0 & -E(9)^2 + E(9)^5 & -E(9)^4 - E(9)^7 & 0 & 0 & -E(9)^2 - 2*E(9)^7 & 0 & 0 & -E(9)^2 - 2*E(9)^7 & -E(9)^2 - 2*E(9)^2 - 2*E(9)^$

^{3, 5, 7, 1, 1, 5, 7, 1, 1, 5, 7, 1, 1, 5, 7, 1, 1, 5, 7, 1, 1, 5, 7, 1, 1, 5, 7, 1, 1, 5, 1, 5, 7, 1, 1, 5}