

Normalisers: N .

$$P_1 = \text{Group}([()]) \cong 1$$
$$P_2 = \text{Group}([(7, 11)(8, 12)(9, 13)(10, 14)]) \cong C_2$$
$$P_3 = \text{Group}([(7, 11)(8, 12)(9, 13)(10, 14), (7, 9, 11, 13)(8, 10, 12, 14)]) \cong C_4$$
$$P_4 = \text{Group}([(i, 11)(8, 12)(9, 13)(10, 14), (i, 9, 11, 13)(8, 10, 12, 14), (i, 8, 9, 10, 11, 12, 13, 14)]) \cong C_8$$
$$N_1 = \text{Group}([(1, 2, 3), (4, 5, 6), (7, 8, 9, 10, 11, 12, 13, 14)]) \cong C_{24} \times C_3$$
$$N_2 = \text{Group}([(1, 2, 3), (4, 5, 6), (7, 8, 9, 10, 11, 12, 13, 14)]) \cong C_{24} \times C_3$$
$$N_3 = \text{Group}([(1, 2, 3), (4, 5, 6), (7, 8, 9, 10, 11, 12, 13, 14)]) \cong C_{24} \times C_3$$
$$A_4 = \text{Group}([(1, x, 0), (1, 0, 0), (1, 0, 0, 10, 11, 12, 10, 14)]) = \mathbb{C}x^4 \times \mathbb{C}0$$