$N_6 = Group([(11, 13), (10, 11)(12, 13), (1, 6, 2, 7, 3, 8, 4, 9, 5), (10, 12)(11, 13), (1, 7, 4)(2, 8, 5)(3, 9, 6)]) \cong C9 \times D8$ $N_7 = Group([(11, 13), (10, 11)(12, 13), (1, 6, 2, 7, 3, 8, 4, 9, 5), (10, 12)(11, 13), (1, 7, 4)(2, 8, 5)(3, 9, 6)]) \cong C9 \times D8$