

1043-20-15

Alberto Gerardo Raggi-Cardenas, Eder Vieyra-Sanchez and Luis Valero-Elizondo*
(valero@fismat.umich.mx), Edificio B, planta baja, Ciudad Universitaria, 58060 Morelia, Mexico.
Minimal groups with isomorphic tables of marks. Preliminary report.

Using GAP we proved that the smallest example of non-isomorphic groups with isomorphic tables of marks has order 96. In this paper we prove that many groups of order less than or equal to 95 cannot have isomorphic tables of marks unless they are isomorphic groups. We use semidirect products because they are preserved by isomorphisms of tables of marks. We use GAP to direct the course of our proofs so that we know what to expect, for example, to know how many groups there are of a given order, although we actually prove all mathematical results GAP provides. (Received June 28, 2008)