1064-20-14 **Luis Valero-Elizondo*** (valero@fismat.umich.mx), Edificio B, planta baja, Ciudad Universitaria, 58060 Morelia, Mich, Mexico, and **Alberto Gerardo Raggi-Cardenas**. *Minimal groups with isomorphic tables of marks.* Preliminary report.

The table of marks of a finite group is a square matrix with non-negative entries that provides a great deal of information about the group. With this matrix one can determine, for example, if the parent group is abelian (and in this case, one can also determine the isomorphism class of the group), and in general one can identify the order of the group, which are its cyclic subgroups, its derived subgroup, its Frattini subgroup, and other important invariants. Two non-isomorphic groups may have isomorphic tables of marks, and the smallest known example of pairs of groups with this property have order 96. In this paper we prove that for many integers $n < 96$, there are no non-isomorphic groups of order n with isomorphic tables of marks. (Received July 26, 2010)