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Title: Finite groups with many values in a column or a row of the character table

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Many results show how restrictions on the values of the irreducible characters on the identity element (that is, the degrees of the irreducible characters) of a finite group G, influence the structure of G. In the current article we study groups with restrictions on the values of a nonidentity rational element of the group. More specifically, we show that S_3 is the only nonabelian finite group that contains a rational element g such that $\chi_1(g) \neq \chi_2(g)$ for all distinct $\chi_1, \chi_2 \in \mathrm{Irr}(G)$. We comment that the dual statement is also true: S_3 is the only finite nonabelian group that has a rational irreducible character that takes different values on different conjugacy classes.

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