

Generalizing a theorem of Huppert and Manz

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ABSTRACT

Huppert and Manz proved that if G is a nonsolvable group where all the character degrees are square-free, then $G \cong A_7 \times S$ where S is a solvable group with no degree divisible by 2, 3, 5, or 7. We weaken the hypothesis of Huppert and Manz's theorem to prove the following generalization. If G is a nonsolvable group and 4 divides no character degree of G , then $G \cong A_7 \times S$ where S is a solvable group with no degree divisible by 2.

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