Murray M. Schacher*, 3203 Wellesly Ave., San Diego, CA 92122, and Danny Goldstein. The admissibility of PSL(2,7). Preliminary report.

A finite group G is admissible over a field K if G is the Galois group of L/K where L is a maximal subfield of a finite dimensional central division algebra over K.

We explore the admissibility of the simple group of order 168, PSL(2,7), over various number fields K. Applications are given to the problem of admissibility of its double cover SL(2,7), where the obstruction involves the splitting of a quaternion algebra. (Received September 26, 2005)