Year: 2017 Vol.: 90 Fasc.: 3-4

Title: Fitting heights of solvable groups with no nontrivial prime power character degrees

Author(s): Mark L. Lewis

We construct solvable groups where the only degree of an irreducible character that is a prime power is 1 and that have arbitrarily large Fitting heights. We will show that we can construct such groups that also have a Sylow tower. We also will show that we can construct such groups using only three primes.

Address:

Mark L. Lewis Department of Mathematical Sciences Kent State University Kent, OH 44242 USA