Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-20-651 **Bret J. Benesh*** (benesh@math.wisc.edu), 480 Lincoln Drive, Madison, WI 53706. *Counting generators of finite groups that are generated by two groups of prime power order.*

Let P be a d-generated p-group and Q be a d-generated q-group for distinct primes p and q. It has been conjectured that for any finite group $G = \langle P, Q \rangle$, G is $(d+1)$-generated. Lucchini determined that any minimal counterexample to this conjecture embeds into L^t where L has a unique minimal normal subgroup $M = S^n$ with S nonabelian simple. Up to information on finite simple groups, we prove that L/M is $(d+1)$-generated or nonsolvable. (Received September 29, 2004)