1037-11-164   **Amod Agashe*** (`agashe@math.fsu.edu`), Department of Mathematics, Florida State Univ, 208 Love Building, 1017 Academic Way, Tallahassee, FL 32306. *Rational torsion in elliptic curves and the cuspidal subgroup.*

Let N be a square free integer, and let A be an optimal elliptic curve over the rationals of conductor N. We prove that if A has a rational torsion point of prime order r such that r does not divide $6N$, then r divides the order of the cuspidal subgroup of the Jacobian $J_0(N)$. (Received January 31, 2008)