1035-11-1640 **Terutake Abe*** (tabe@tamiu.edu), Dept. of Mathematical and Physical Sciences, Texas A&M International University, Laredo, TX 78041, and **Ashvin Rajan** and **Francois Ramaroson**. *A Few Remarks on Congruent Numbers.*

Adapting an argument by Nigel Boston, we provide a new elementary proof of a Theorem due to J.S. Chahal which asserts that every residue class $a \pmod 8$ for which $\gcd(a, 8)$ is square-free contains an infinite set of congruent numbers. We then establish the following stronger result. Fix a positive integer q, an integer a such that $\gcd(a, q)$ is square-free, and a real number θ such that $0 < \theta < \pi$, with $\cos\theta$ rational. Then the number of integers in the interval $[1, x]$ that are θ-congruent numbers belonging to the residue class $a \pmod q$ is at least $\mathsf{O}(\sqrt{x})$. (Received September 20, 2007)