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Jay L. Schiffman* (schiffman@rowan.edu), Rowan University, 201 Mullica Hill Road, Glassboro, NJ 08028-1701. Exploring Goldbach's Conjecture Via CAS (Computer Algebra System)Technology. Preliminary report.

Goldbach's Conjecture asserts that every even integer > 2 can be expressed as the sum of two primes. Another version of this conjecture is that every odd integer > 5 can be expressed as the sum of three primes. In this paper, simple programs for a CAS capable calculator such as the TI-89 or VOYAGE 200 will be discussed to enable undergraduate and pre-service students to obtain a better grasp of this simply posed open problem in elementary number theory. While this conjecture remains unresolved since the time of Leonhard Euler, the crux of the problem is readily accessible to any good middle school or high school student. (Received August 22, 2008)