

1086-VC-1371      **Lee Stemkoski\*** ([stemkoski@adelphi.edu](mailto:stemkoski@adelphi.edu)), Dept. of Math and Comp. Sci., 211 Post Hall,  
Adelphi University, 1 South Ave., Garden City, NY 11530. *The work of Leonhard Euler related to  
Fermat's Last Theorem.*

Leonhard Euler is credited as having solved Fermat's Last Theorem for the case where the exponent is 3. However, the proof as presented in Euler's *Algebra* of 1770 contains a step which, although correct, is not justified. Historians nonetheless credit Euler with the proof, often referencing an earlier paper (*Supplementum quorundum...*, published 1760) where calculations appear that could be used to provide an alternative proof of the unjustified step in Euler's *Algebra*. We present a translation of this earlier paper and discuss the results related to Fermat's Last Theorem, as well as the possibility that Euler had worked on an alternative proof of Fermat's Last Theorem (for exponent 3), based on references in his correspondence with Goldbach. (Received September 21, 2012)