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C Edward Sandifer* (sandifere@wcsu.edu), C Edward Sandifer, Department of Mathematics, Western Connecticut State University, Danbury, CT 06810. *Euler, Lagrange and Cauchy: Three perspectives on the "Euler Identity"*.

The transformation in the foundation of analysis between Euler's 1748 classic *Introductio in analysin infinitorum* and Cauchy's 1821 work *Cours d'analyse* is illustrated by their different treatments of the Euler identity, $e^{i\pi} = -1$. We describe those proofs, along with that of Lagrange, and show how their different approaches reflect the underlying transformation in analysis. (Received September 11, 2008)