

Meeting: 1003, Atlanta, Georgia, MAA CP X1, MAA General Contributed Paper Session, I

1003-X1-1143 **David Richeson*** (richesod@dickinson.edu), Department of Mathematics and Comp. Sci., Dickinson College, Carlisle, PA 17013, and **Christopher Francese**. *Euler's proof of his polyhedral formula.*

We present Euler's proof of his polyhedral formula (for a convex polyhedron with F faces, E edges and V vertices, $F - E + V = 2$). Although the formula is well known, Euler's proof is not. We discuss the shortcomings of his proof and indicate how the proof can be repaired. We have, available for distribution, a complete English translation of this paper (originally written in Latin). (Received October 04, 2004)