Meeting: 1002, Pittsburgh, Pennsylvania, SS 3A, Special Session on The History of Mathematics

1002-01-22 **Gordon A. Swain*** (`gswain@ashland.edu`), Dept. of Mathematics and Computer Science, Ashland University, 401 College Ave., Ashland, OH 44805. *Changing Proofs for the Quadrature of the Parabola.* Preliminary report.

The problem of determining the area between a parabola and a straight line has been revisited frequently since it was first solved by Archimedes. The approach and style of each proof reflects the mathematical knowledge and current tool set of each era. From this perspective we consider proofs as given by Archimedes, Thabit ibn Qurra and Ibrahim ibn Sinan, and John Wallis. (Received July 01, 2004)