1116-VE-2523      **John Donnelly*** (`jrdonnelly@usi.edu`), 8600 University Blvd, Evansville, IN 47712.
*Equivalences in Absolute Plane Geometry.*

Absolute Geometry is plane geometry in which we assume no parallel postulate. Absolute Geometry can be thought of as being a common ground between Euclidean Geometry and Hyperbolic Geometry, and the axioms of Absolute Geometry are satisfied by both Euclidean and Hyperbolic Geometry. There are several ways to develop an axiom system for Absolute Geometry. One of the axioms often used when developing an axiom system for Absolute Geometry is the Side-Angle-Side criterion for congruence of triangles. It is well known that if one removes Side-Angle-Side as an axiom and replaces it with Angle-Side-Angle as a new axiom, then the resulting new axiom system is also Absolute Geometry. We will talk about the consequences of replacing Side-Angle-Side with either Side-Angle-Angle or Side-Side-Side as new axioms. (Received September 22, 2015)