Bisecting a Segment in the Klein Model

P. Coulton *

Department of Mathematics Eastern Illinois University

Abstract We show that the segment bisector of any segment whose extended line is a Euclidean distance a below the origin on the y-axis in the Klein model is obtained by finding a point the line y = -1/a and constructing the lines from this point Q to obtain a "bow-tie" relation.

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^{*}Author, E-mail: prccoulton@eiu.edu



Fig. 1.1. This construction is the basis of the proof.

Department of Mathematics Eastern Illinois University