Timothy Luke Muggy* (lukemuggy@yahoo.com), 3200 Pheasant Ridge Rd., Lincoln, NE 68532, and Daniel Murphree. The 3-point Steiner problem on the projective plane of constant Gaussian curvature.

The n-point Steiner Problem has become a fascinating optimization problem with applications in numerous fields such as circuit layout and network design. However, there has yet to be extensive contributions on non-orientable surfaces. Our investigation seeks to develop an efficient method for solving the 3-point Steiner Problem on a projective plane of constant Gaussian curvature utilizing a Mathematica program that we created. (Received August 14, 2006)