1125-D1-1088 William Wood*, bill.wood@uni.edu. Very Special Functions: Perspectives of Generalized Trigonometry.

The classical trigonometric functions can be generalized to parameterize circles in other geometries. One example is the "squigonometric" functions for the planar p-norm, an idea that has been rediscovered and repackaged in a number of ways. We will look at some of the different approaches mathematicians have taken to these functions and offer them as an illustration of mathematical discovery that starts with basic calculus. (Received September 14, 2016)