Michael S Marion* (msmarion@earthlink.net), 140 BPW Club Road, Apartment B24, Carrboro, NC 27510. Explaining Standard Deviation Geometrically. Preliminary report.

Students in introductory Statistics courses often find standard deviation one of the more perplexing topics. While they generally understand the concept of standard deviation as a measure of variability, they frequently have difficulty with two other important issues: namely, why do we average squared deviations, and why do we calculate standard deviation for a sample differently than for a population? By reinvestigating geometric interpretations for data, we can describe standard deviation in a manner that both instructors and students can better conceptualize. (Received September 13, 2007)