## 962-E1-596 Cathy W Carter\* (ccarter@cbu.edu), Christian Brothers University, 650 East Parkway South, Memphis, TN 38104, and Pascal Bedrossian (pbedross@cbu.edu), Christian Brothers University, 650 East Parkway South, Memphis, TN 38104. When Must It Fit? Classroom Activities with Modeling and Sampling.

Reform mathematics' incorporation of data sets throughout the curriculum provides new opportunities to convey statistical ideas and concepts to students. In "Math Modeling with Algebra" and "Applied Mathematics with an Introduction to Calculus" courses, we consider sets of data (sometimes disguised as sequences). After plotting the sets, students select the appropriate model, and use regression functions on calculators to come up with an equation for the model. Adding the graph of the function to the scatter plot gives the student the feel for the fit. Comparison of this fit with the correlation coefficient produced by the calculator gives the intuitive idea of correlation without the extensive algebra necessary to produce it. Current texts depend on data driven examples to convince students of the practical nature of mathematics. Comparisons of data sets to the "nice" models that describe them are obvious introductions to the concepts of samples, population, and fit. This paper will share similar examples of classroom activities where elementary statistical concepts arise within general education courses. (Received September 15, 2000)