Meeting: 1003, Atlanta, Georgia, MAA CP L1, MAA Session on Using Real-World Data to Illustrate Statistical Concepts, I

1003-L1-88 Murray H. Siegel* (siegel@gssm.k12.sc.us), 401 Railroad Avenue, Hartsville, SC 29550.

Pizza and the Facts About Linear Regression.

Data on fat content and caloric content of various brands of pizza are used to illustrate the concepts studied when we investigate linear regression. The regression line as a "two-dimensional mean" is discussed. The concepts of slope, intercepts, the variation of values of the y-variable for a fixed value of x, and the meaning of the coefficient of determination become more clear in the student's mind. Without the use of real data, which are of interest to the student, the discussion of linear regression becomes an algorithmic exercise. (Received August 02, 2004)