1086-M5-1256

James C. Price* (j.c.price@uafs.edu), UAFS, Department of Mathematics, 5210 Grand Avenue, P.O. Box 3649, Fort Smith, AR 72913-3649. Bringing Mathematics to Life through Dialogue Based Activities and Manipulatives.

Recently, I took over teaching college mathematics at my institution. While talking to my colleagues and consulting various reports on best practices in teaching such a course, I repeatedly came across the word activity. To be honest, I was somewhat perplexed at the time by what an activity in mathematics should be, but I was determined to try to incorporate it into my class. The result of these efforts was a series of dialogue based activities that use manipulatives and inquiry based learning to engage liberal arts students in mathematics. In this talk, I will present one of these activities, which is a dialogue between a Ludwig, Amadeus, and Johann entitled, The Music of Optimization. In it, a student discovers how music and optimization can be related, and how mathematics can be used to bring a problem to life. (Received September 20, 2012)