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Cathy W. Grilli* (cgrilli@cbu.edu), 650 East Parkway S., Memphis, TN 38104. *Walking the Line.*

An activity that I have found engages students in a Liberal Arts math class is using data collection devices and motion detectors. These exercises help students realize that functions are not items that mathematicians invented to torture them, but are a way to discuss occurrences in everyday life. A particular activity is to have students walk until they can produce different lines on the calculator. Of course, at each stage students are asked how they got the desired result and how this relates to slope. The relationship between speed, distance, and time is examined. With sufficient practice, ball tosses and drops can generate parabolas. Producing cooling curves show that exponential functions do exist outside of mathematics texts. Graphs can be transferred to paper for further analysis. While science majors may encounter instruments in labs that relate functions to their experiences outside of the classroom, liberal arts majors are less likely to do so. The talk will include the student instructions sheet so that the exercise can be taken into other classrooms. At the end of the semester, several students commented that these exercises were some of the best parts of the course. (Received September 17, 2013)