

Meeting: 1003, Atlanta, Georgia, MAA CP C1, MAA Session on Courses Below Calculus: A New Focus, I

1003-C1-649 **Ronald J Harshbarger*** (ronharsh@hargray.com), University of South Carolina Beaufort, 1 University Blvd, Bluffton, SC 29909, and **Lisa S Yocco** (lisay@georgiasouthern.edu), Georgia Southern University, Statesboro, GA 30460. *Financial Survival and College Algebra Applications.*

College Algebra Applications provide powerful tools for the future financial survival of our students. Students are not only interested in talking about financial topics, they need to acquire certain knowledge and skills to protect themselves from being taken advantage of in the marketplace and to create a "nest egg" for the future. Algebraic functions can be used to show students how long they will likely live, how unlikely it is that the government will provide for them in their old age, and how easy it is to prepare for the future if they recognize that time is the most important factor in the time value of money. Examples to consider include expected life span, which can be modeled using linear functions, quadratic, logarithmic, and logistic functions. Exponential growth functions can be used to model inflation and the purchasing power of \$1, which shows that expenses will not only continue in retirement, but are likely to increase. Exponential decay can be used to model the number of workers available to support each Social Security recipient. Exponential functions can be used to consider IRA annuities established by twins with one investing for a short period of time and a second one investing much more but starting later, to show how important it is to invest early. (Received September 26, 2004)