1035-D1-195 Kimberly J. Burch* (kjburch@iup.edu), Indiana, PA 15705. Beat the Pumps with Algebra. Preliminary report.

Students find word problem assignments uninteresting, grumbling that they only want the formulas and failing to see any relevance to their lives. To alleviate their complaints and demonstrate the relevance of algebra to their lives, students will complete a semester-long project modeling the price of gasoline at a service station of their choice. Students will collect data for a sequence of weeks and employ graphing calculators to develop a model to predict both short- and long-term prices of gas. Students will be guided in developing interesting questions to investigate, such as the best time of the day, week, or month to buy gasoline. Using regression techniques discussed in class, they will develop appropriate models of price variations. Then, to contrast with results from our rural community, comparable data from a metropolitan area (Pittsburgh, PA) service station will be provided to enable students to test the universality of their models. The models will be presented via a poster presentation where students will share their findings in a relaxed classroom setting. (Received August 15, 2007)