Economics 312 **Spring 2013**
Daily Problem #9 **Adjusted due date: February 15**

Today's problem explores alternative functional forms and when we might use them. For each of the following situations, which of the models in HGL's Table 4.1 would be appropriate and why, and how would you interpret the β_2 coefficient for that model (or those models, there may be more than one that could be appropriate)?

1. We want to estimate the demand for asparagus as a function of its price. We believe that the elasticity of the demand for asparagus is constant at all levels of price.
2. We want to estimate a Keynesian consumption function (consumption as a function of real disposable income) and we believe that the marginal propensity to consume (the amount of an additional dollar of income that is consumed) is constant.
3. We want to estimate the effect of the size of a home on its sale price. We believe that size has a greater marginal effect on price for smaller homes than for larger ones.
4. We want to estimate a production function with output as a function of labor input. Capital input is constant in our sample, so we expect diminishing marginal returns to labor.