

Homework 1. Due Wednesday August 28.

1. Using the Matlab program `Econ8331_Probit.m` program posted, simulate and estimate a probit estimator (you need to write and insert the likelihood function).
2. Use the program from question 1. and still simulate the same model using normal draws, but now estimate the parameters using a logit model.
3. For the probit model that you estimated. calculate the standard errors of the estimated parameters in three different ways and compare: Using the Hessian (calculated analytically), using the Hessian calculated numerically, using the Outer Product of the gradients. Are they similar? Compare for a small sample and for a longer sample.