You are interested in how people set prices on houses they are trying to sell and how that affects how long it takes to sell them. You are given data on a large cross-section of houses across a number of metropolitan areas. For each house, you observe characteristics of the house, characteristics of the owner, the history of the asking price as a function of how long it was on the market, how long it took to sell, and the sale price.

1) Write down an equilibrium model of how people decide how to set asking prices based on optimizing behavior. Make sure that there is some randomness (from the point of view of the econometrician) built into the model; i.e., do not rely on measurement error.

2) Given the data described above, suggest how to estimate your model.

3) Given estimates, suggest how to measure the effect on housing prices and time on the market of a significant reduction in jobs in a local housing market.