## Homework 7

Do problems 2, 4 and 5 at the end of chapter 18 from Garin, Lester and Sims. Here they are (with a correction to a typo that appears in question 2b in the book):

- 2. Consider the basic Neoclassical model. Suppose that there is an increase in  $\theta_t$ .
  - (a) Graphically analyze this change and describe how each endogenous variable changes.
  - (b) Now, draw out two versions of the model, one in which labor demand is relatively elastic (i.e. sensitive to the real wage), and one in which labor demand is relatively inelastic (i.e. relatively insensitive to the real wage). Comment on how the magnitudes of the changes in  $Y_t$ ,  $r_t$ ,  $w_t$  and  $N_t$  depend on how sensitive labor demand is to the real wage.
- 4. Consider the basic neoclassical model. Suppose that there is a reduction in  $A_t$ . In which direction will  $P_t$  move? Will it change more or less if money demand is less sensitive to  $Y_t$ ?
- 5. Consider the basic Neoclassical model. Graphically analyze the effects of:
  - (a) An increase in  $G_{t+1}$ .
  - (b) An increase in  $A_{t+1}$ .
  - (c) A permanent increase in productivity (i.e.  $A_t$  and  $A_{t+1}$  increase by the same amount).

In each case, clearly describe how each endogenous variable changes.