1. Suppose that households increase labor supply in response to a rise in the real interest rate. Assume that all the other assumptions of the flexible price model hold.
   a. Compute the reduced form multipliers $\frac{\partial y}{\partial g}$ and $\frac{\partial r}{\partial g}$ and provide an explanation of these multipliers.

2. Consider an exogenous decrease in government spending that is completely matched by a decrease in tax revenues (i.e., $dg = d\tau$). Predict the effect of this hypothesized fiscal policy action on output, employment, and the nominal interest rate using a) the “sticky-wage” model and b) the “sticky-price” model as developed in class. For each model, you may use the following simplified expression for aggregate demand: $y = c(y - \tau, r) + i(r) + g$, where $i'(r) < 0$. Briefly explain and interpret these multipliers in terms of the implied economic behavior.

3. The static classical model discussed in class is consistent with Fisher’s hypothesis in that the equilibrium response of the real interest rate to an exogenous change in expected inflation is zero. Compute the reduced form multiplier $\frac{\partial(R - \pi)}{\partial\pi}$ implied by a) the rigid nominal wage and b) the imperfect information models discussed in class. Discuss the implications of these multipliers for Fisher’s hypothesis in each case.

4. Suppose we believe that crude oil is an input into the aggregate production process, along with capital and labor. Explain how you would extend the basic macroeconomic framework developed in class to account for this revised production process. You need not solve the model, but explain any equations you might add, the economic behavior underlying those equations, and so on.

5. Compute the reduced form multipliers for output and price in response to an exogenous change in the foreign interest rate for both the fixed exchange rate and flexible exchange rate regimes. Explain the underlying economic behavior and equilibrium adjustment implicit in these multipliers.