## **PROBLEM SET 6**

## DUE AT THE **BEGINNING** OF LECTURE ON THURSDAY, APRIL 26<sup>TH</sup>

You may work together on the problems, but your answers must be *in your own words* and *handwritten*. You also must *list the other students with whom you worked*.

For all questions be sure to explain your answers and to use graphs whenever appropriate.

- **1.** Suppose that the economy begins at potential output. Now, there is a tax cut.
  - **a.** Use the Keynesian Cross diagram to show the effect, if any, of the tax cut on output in the short run.
  - **b.** Explain how the economy returns to potential output. Be sure to describe what happens to inflation and the real interest rate as the economy returns to potential.
  - **c.** What effect, if any, will the tax cut have on the long-run real interest rate and normal investment?
  - **d.** Suppose that the tax cut includes substantial reductions in business taxes, and that the administration is right that cutting business taxes increases planned investment at a given real interest rate. How, if at all would this change the answer to part (c)?
- **2.** What would you expect each of the following developments to do to the price of dollars in euros?
  - **a.** European investors lose confidence in American assets and decide to buy fewer American stocks and bonds.
  - **b.** The European Union removes its existing tariffs on goods from the United States.
  - **c.** Inflation is higher in the United States than in Europe.
- **3.** Suppose that a fall in house prices decreases wealth substantially. (For simplicity, assume that the economy begins in long-run equilibrium.)
  - **a.** How will this change affect output in the short run?
  - **b.** Suppose the Federal Reserve wants to prevent the impact you found in part (a). Should it increase the real interest rate, decrease it, or leave it unchanged (or is it not possible to tell)?
  - **c.** How, if at all, should the Federal Reserve change the supply of money in order to bring about this change in the real interest rate?