Problem Set 2

1. Chapter 5, problem 2

2. Chapter 5, problem 3

3. Use the model from problem 3 to analyze the following:
   
   a. Derive the equation for the IS curve with i a function of Y. Use your equation to show how the slope of the IS curve depends on the ratio of b₁ to b₂. If b₁/b₂ is larger, is the IS curve steeper or flatter?
   
   b. Use your result from problem 3 part b to find the effect of an increase in M/P on Y. How does the size of the rise in output for a given increase in real balances depends on b₁/b₂?
   
   c. Give an economic interpretation of these two answers. That is, what does it mean that b₂/b₁ is larger and why does this lead to a larger increase in output when real balances rise?
   
   d. Use the equation for the LM curve to show how its slope depends on d₁/d₂. Give an economic interpretation of what a rise in d₂ relative to d₁ means for money demand.
   
   e. Show how the effect of an increase in government spending, G, on output depends on d₁/d₂.
   
   f. What happens to the multiplier, ∂Y/∂G, if you set d₁ equal to zero? Can you explain why government spending does not crowd out investment in this case using your economic interpretation in part d?
   
4. Chapter 5, problem 11 – as you look up the data, compare the recession of 2001 to the current (or just past) one.