1. For all parts of this question, be sure to explain the intuition behind your answer, in addition to any mathematical expressions you use.

   a) Consider an open market sale of British Treasury securities by the Bank of England that results in a 500,000 pound decrease in the monetary base. Suppose that individuals hold no currency and banks hold only required reserves (with a required reserve ratio of .10). How much will M1 change?

   b) Because of fears about how many people will want to withdraw their deposits, all banks now hold 5% of deposits as excess reserves (beyond what is required), and people fearful of bank failures now hold cash. Specifically, people take 15% of any loan they receive and hold it as cash (and also take 15% of the initial payment for their bond and hold it as cash), putting the remainder in the bank. Using balance sheets for 3 banks in the banking system (there are many, but you should show the “first” three to be affected by the open market purchase), show what will happen if the same 500,000 pound open market sale is undertaken. (You should show changes to the balance sheets (reserves, loans and deposits), not actual balances.) Also, show what the currency deposit ratio will be in this case.

   c) What are the money multipliers in (a) and (b)? Explain intuitively why they differ.

   d) What effect would you expect the monetary policy change in a) above to have on the nominal exchange rate and on the real exchange rate? Explain briefly.

2. Explain briefly the following statement: “The U.S. trade deficit is financed by a steady sale of American assets – stocks, bonds, real estate, and, increasingly, whole corporations to foreigners.”

3. Explain briefly the following statement: “A strong currency will weaken exports by making a country’s products more expensive abroad.”

4. Assume the following Euro exchange rates:

   Yen/Euro: 126
   USD/Euro 1.40

Assume also that a Mercedes Benz car, manufactured in Germany, costs 40,000 Euro.

   a) The price of the same car in Japan is 5,000,000 Yen. Does purchasing power parity hold between Germany and Japan? Is the Yen overvalued or undervalued (on a PPP basis)? Show your calculations and explain briefly.

   b) Why might purchasing power parity not hold between Germany and Japan for a particular model of Mercedes Benz car? Explain briefly.

   c) Using the two exchange rates listed above, calculate the exchange rate between the Yen and the US dollar (USD). If this rate changed to 100 Yen/USD, what would you expect to happen to the US current account (you may ignore all other exchange rates with other countries)? Explain briefly.