

Due Date: Monday, October 24th

Read Chapter 4 thoroughly. Then, answer the following:

- 1) Suppose that real money demand is represented by the equation $(M/P)^d = 0.25*Y$. Use the quantity equation to calculate the income velocity of money.

- 2) Assume that the demand for real money is $(M/P)^d = 0.6*Y - 100i$, where Y is national income and i is the nominal interest rate. The real interest rate r is fixed at 3 percent by the investment and saving functions. The expected inflation rate equals the rate of nominal money growth.
 - a) If Y is 1000, M is 100, and the growth rate of nominal money is 1%, what must i and P be?

 - b) If Y is 1000, M is 100, and the growth rate of nominal money is 2%, what must i and P be?

- 3) Econoland finances government expenditures with an inflation tax.
 - a) Explain who pays the tax and how it is paid.

 - b) What are the costs from this tax?

- 4) A macroeconomist threatens to call the Secret Service to have Mr. Biggy Rich arrested for counterfeiting because Mr. Rich claims he “makes a lot of money.”
- a) Explain why the macroeconomist is making this threat based on the macroeconomic definition of money. Be sure to explain the macroeconomic functions of money.
 - b) Suggest an alternative phrase that Mr. Rich can use that will not result in a charge of counterfeiting.
- 5) Imagine that you are the chairman of the Federal Reserve. Assume, further, that the money supply has been growing at 3 % per year. You have been called before Congress to testify about the long-run effects of increasing the growth of the money supply to 10 % per year. State and then explain the long-run effects of this change on each of the following (give numerical estimates when possible):
- a) the annual rate of inflation
 - b) the real interest rate
 - c) the nominal interest rate
 - d) the real exchange rate
 - e) the nominal exchange rate
 - f) investment (ignore both taxes and uncertainty)
 - g) real GDP