Problem Set 3

Answer the following questions:

1) What are the three categories into which the central statistical office divides everyone? How does it compute the labor force, the unemployment rate, and the labor force participation rate?

2) Why is frictional unemployment inevitable? How might the government reduce the amount of frictional unemployment?

3) How would an increase in the world price of oil affect the amount of frictional unemployment? Is this unemployment undesirable? What public policies might affect the amount of unemployment caused by this price change?

4) What claims do advocates of unions make to argue that unions are good for the economy?

5) Draw the supply curve and the demand curve for a labor market in which the wage is fixed above the equilibrium level. Show the quantity of labor supplied, the quantity demanded, and the amount of unemployment.

6) Are the following workers more likely to experience short-term or long-term unemployment? Explain.

a. a construction worker laid off because of bad weather.

b. a manufacturing worker who loses her job at a plant in an isolated area.

c. a coach-industry worker laid off because of competition from railroads.

d. a short-order cook who loses his job when a new restaurant opens across the street.

e. an expert welder with little formal education who loses her job when the company installs automatic welding machinery.

7) Using a diagram of the labor market, show the effect of an increase in the minimum wage on the wage paid to workers, the number of workers supplied, the number of workers demanded, and the amount of unemployment.

8) Suppose that Congress passes a law requiring employers to provide employees some benefit (such as health care) that raises the cost of an employee by $4 per hour.

a. What effect does this employer mandate have on the demand for labor? (In answering this and the following questions, be quantitative when you can.)

b. If employees place a value on this benefit exactly equal to its cost, what effect does this employer mandate have on the supply of labor?

c. If the wage is free to balance supply and demand, how does this law affect the wage and the level of employment? Are employers better or worse off? Are employees better or worse off?

d. Now suppose that workers do not value the mandated benefit at all. How does this alternative assumption change your answers to parts (b) and (c) above?

9) What distinguishes money from other assets in the economy?

10) Why don't banks hold 100 percent reserves? How is the amount of reserves banks hold related to the amount of money the banking system creates?

11) What are the reserve requirements? What happens to the money supply when the Fed raises reserve requirements?

12) Assume that the banking system has total reserves of $100 billion. Assume also that required reserves are 10 percent of checking deposits, and that banks hold no excess reserves and households hold no currency.

a. What is the money multiplier? What is the money supply?

b. If the Fed now raises required reserves to 20 % of deposits, what is the change in reserves and the change in the money supply?