## Homework Set 10

In this exercise, I use the phrase NGNC, which means "No graph, no credit". That means a welllabeled and well explained graphs would appear an integral part of the answer. The grader is unlikely to give credit unless both the graph and an explanation appear. (To be clear, I reproduce part of the instructions to the grader below).

## I mean it. In grading, no graph means any points. <br> A graph with no explanation means at most half points (and even less if they graph is wrong). It is important in terms of exam preparation that you be strict on this point

1. (10\%) NGNC. To answer this question, think in terms of our basic demand and supply of labor. Suppose initially the demand curve for labor intersects the long run supply curve of labor just where the short run labor supply curve intersects the long run supply curve. Suppose now that the demand curve for labor shifts to the right; suppose also that the public perceives this as a permanent shift in the demand curve. What would happen to the wage rate and the total amount of labor working?
2. (10\%) NGNC. To answer this question, think in terms of our basic demand and supply of labor. Suppose initially the demand curve for labor intersects the long run supply curve of labor just where the short run labor supply curve intersects the long run supply curve. Suppose now that the demand curve for labor shifts to the right; suppose also that the public perceives this as a temporary shift in the demand curve. What would happen to the wage rate and the total amount of labor working?
3. (10\%) NGNC. To answer this question, think in terms of our basic demand and supply of labor. Suppose initially the demand curve for labor intersects the long run supply curve of labor just where the short run labor supply curve intersects the long run supply curve. Suppose now that the demand curve for labor shifts to the right; suppose also that the public initially perceives this as a temporary shift in the demand curve, and only over time understands this as a permanent shift in the demand curve. What would happen to the wage rate and the total amount of labor working?
4. (20\%). NGNC. Consumer A has an endowment of 20 units of good $Y$ and 6 units of good $X$, while consumer $B$ has an endowment of 12 units of good Y and 30 units of X . Draw an Edgeworth box diagram and show the endowment point. From this information will A trade Y for X or X for Y if a competitive market? Explain.
5. (10\%). NGNC. John and Sally are both attending college; their best employment opportunity while in college is to work at McDonald's for $\$ 6$ an hour. John is majoring in economics; Sally, in philosophy. Whom would you expect to work more hours while in college: John or Sally? Why?
6. (15\%). NGNC. Suppose a tornado destroys a large number of major factories.

- What is the effect on the demand for labor?
- If the factories are owned by workers (say through stock ownership) what is the effect on the supply of labor.
- What is the effect on the wage rate, the amount of labor supplied to the marketplace and the amount of labor supplied by an individual? (Assume the factories are not owned by the workers).

7. (10\%). NGNC. Suppose that an epidemic kills half the workers in an industry that produces goods for export. What is the effect on the wage rate, the amount of labor supplied to the market place and the amount of labor supplied by any individual surviving worker? You may assume the world market for the good is competitive.
8. (15\%) NGNC. Explain whether you agree or disagree with the following statements.

- If an industry is monopolized, it will hire fewer workers than when the industry is competitive.
- If an industry is monopolized, it will hire fewer workers if the monopoly firm can also become a monopsonist
- If a firm selling in a competitive market can establish a monopsony position in the labor market, it will hire just as many workers if it is able to engage in wage discrimination.

