

## Homework #9

modifications of problems #1, 4, 6 and 8 from Ch. 14, p. 315 of Mankiw *Principles...*(2nd ed.)

1. The Bureau of Labor Statistics announced that in the year 2004, of the adult American population:

139,252,000 were employed (on average),  
8,149,000 were unemployed (on average) and  
75,956,000 were not in the labor force (on average)

- a. How big was the labor force?
- b. What was the labor force participation rate?
- c. What was the unemployment rate?

Now suppose that 5,000,000 of the adult Americans classified as “not in the labor force” are “discouraged workers” – people who would like to work, but are unable to find jobs. If these people were classified as “unemployed” instead of “not in the labor force,” then:

- d. How big would the labor force be?
- e. What would the labor force participation rate be?
- f. What would the unemployment rate be?

4. Between 1997 and 1998, total U.S. employment increased by 2.1 million workers, but the number of unemployed workers declined by only 0.5 million.

- a. How are these numbers consistent with each other?
- b. Why might one expect a reduction in the number of people counted as unemployed to be smaller than the increase in the number employed?

6. Using a diagram of the labor market, show the effect of an increase in the minimum wage on:

- a. the wage paid to workers
- b. the number of workers supplied
- c. the number of workers demanded and
- d. the amount of unemployment

8. Consider an economy with two labor markets, neither of which is unionized. Now suppose that a union is established in one market.

- a. Show the effect of the union on the market in which labor is formed. In what sense is the quantity of labor employed in this market an inefficient quantity?
- b. Show the effect of the union on the non-unionized market. What happens to the equilibrium wage in this market?