Wilf Csaplar Jr.   Economics 302   Homework #2   **Due Monday 2/11**

Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (15 points) Draw the production function with capital on the horizontal axis. Illustrate the effects of an improvement in technology on the diagram. Explain why the curve moved as drawn.

2) (35 points) Draw the production function with labor on the horizontal axis. Below it, draw the labor supply and demand diagram. Illustrate the effects of an increase in the amount of capital. Explain why the curve(s) moved. What happens to the amount of labor hired, the real wage rate, and the level of GDP? Briefly explain how you reached each conclusion.

3) (20 points) Most people think that taxes will go up within a year. Draw the labor supply and demand diagram. Illustrate the effects of an expected increase in the income tax in the future. Explain why the curve(s) moved as drawn. What happens to the number of people hired and the real wage rate?

4) (10 points each) For each event, determine what happens to the labor force participation rate and the unemployment rate. Explain your logic. If the unemployment rate changes, determine which type of unemployment changed and briefly explain your logic.
A) John decides that his children are old enough that he would like to work rather than be a stay-at-home dad. Therefore, he starts looking for a job.
B) Bill has been unemployed for so long, he quits looking for a job.

5) (10 points) Explain $\dfrac{\Delta Y}{Y} = 3 - 2u$

If you define $\Delta Y/Y$, you can treat it as one variable. Explain why the number 3 is positive rather than 0. Explain why a change in u will affect $\Delta Y/Y$ in the manner described. You do not need to explain the 2.