Wilf Csaplar Jr.   Economics 162   Homework #5   **Due Friday 10/9**

Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up 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) (25 points) Suppose that consumers bought $500 worth of goods; firms built $200 worth of factories; the government spent $250 on government officials' salaries; exporters sold $90 worth of goods; importers bought $100 worth of goods; buildings lost $20 worth due to wearing out; corporations paid $50 in indirect business taxes, received $15 in subsidies, and paid $70 worth of business taxes; Social Security paid out $130 to retirees; and individuals paid $220 in income tax. Use this information to calculate GDP, NDP, NI, PI, and DPI. If you need a number which is missing, assume it is zero. Write out in words what you are adding and subtracting and show all calculations.

2) (10 points) To retire and keep your standard of living, you need to save 20 times your annual income. Suppose your retirement fund earns 6% interest and if you earn $50,000/year. If you save for 40 years, you need to save $502.14/month. If you save for 30 years, you need to save $1070.05/month. There are two reasons why the extra 10 years greatly reduces how much you have to save. What are the two reasons? Explain your logic. (Note that this means you should start saving for retirement today.)

3) (20 points each) Your book says that there are four keys to development. For the keys mentioned below, explain what that means and how it helps the economy to grow. Answer each part in separate paragraphs.
A) secure property rights
B) limit protectionism

4) (5 points) Suppose that US Treasury Bonds pay 3% interest and stocks typically give 9% return. How long will it take for each to double in value? Show all calculations and briefly explain what you did.

5) (20 points) Explain how lengthening the time a patent lasts can help the economy. Also explain how that could hurt the economy.