

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.

Note that for the rest of the semester, assignments are on Mondays, except for this one because the week after break has no Monday classes. Therefore, it is due on Wednesday.

1) (20 points) Use the following data to calculate GDP, NDP, NI, PI, and DPI. Consumers buy \$1000 worth of goods. Firms buy \$500 worth of machines. The government buys \$600 worth of services. We import \$200 worth of goods and export \$150 worth. Capital lost \$40 worth of value. Firms paid \$30 worth of business taxes and retained \$25 of earnings. Consumers paid \$120 worth of income tax. Show all work. If you need data which is not provided, assume it is zero.

2) (5 points) Does real GDP or nominal GDP normally grow faster? Why?

3) (20 points) In this course, we always assume that larger real GDP is better for the country. Explain two reasons why this might be a false assumption.

4) (15 points) In the all-campus e-mail I sent out on 2007/02/28, I wrote this about saving now for retirement:

How much should you be putting away each month? If you want to have the same living standards after retirement, you should have about 20 times your annual income saved up at retirement. Therefore, if you are earning \$50,000 just before retirement, you should have saved \$1,000,000. That seems like a lot. However, it is not that hard if you start saving at a young age. If you expect to retire 45 years from now and expect to earn 5% after inflation you need to save 11% of your income. If you expect to retire in 40 years, you need to save 14% if you have no current savings. If you wait until 30 years before you retire, you need to save 27% of your income. If you wait until 25 years before you retire to start saving, you need to save 37% of your income. Start saving NOW. Of interest, if you get 7% return after inflation, you only need 5.9% for forty five years, 8.5% for forty years, 18% for thirty years or 27% for twenty five years.

Why does it only require 11% of your income to be saved if you retire in 45 years, but it requires 37% if you wait until 25 years before you retire? Why do those twenty years matter so much? Give two reasons.

5) (20 points each) For each part, explain what that means and how it helps a country to have its economy develop.

A) Limiting protectionism

B) Letting *creative destruction* run its course.