

Do not put your name anywhere on the assignment, other than on the back of this sheet of paper. 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 do double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (10 points) In the all-campus e-mail I sent out on 2/28, I wrote this:

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?

2) (20 points) Suppose that the length of patents had to be changed. Would you lengthen them or shorten the duration they are valid? Explain your logic.

3) (20 points) Read the case study on page 214. Answer #1 on the *Points to Analyze*.

4) (15 points each) For each of the following, explain how it helps economic growth.

A) Limiting protectionism.

B) Establishing a system of property rights.

5) (20 points) What are two negative aspects of economic growth? Explain how growth causes them.