

In-Class Exercise #7

Name:

1) Suppose Judy is deciding between college and no college. To make the calculations easier, we will collapse college from four years into one year. Assume that if Judy does not go to college, she will work for 30 years, receiving \$25,000 a year. If she attends college, she will pay \$65,000 in tuition and then will earn \$35,000 a year for 29 years.

- a) What will Judy do if her discount rate is 5%?
- b) What will Judy do if her discount rate is 15%?

2) Consider a large health crisis like the AIDS epidemic in Africa. The epidemic has substantially shortened life expectancies in a number of countries. How will this affect the decision to invest in human capital for individuals living in these countries?

3) Below are the age-earnings profiles for full-time workers, separately by gender (these graphs also appear on p.256 of your text).

- a) Notice that the earnings profiles are upward sloping. Give an explanation for the increasing wages that is consistent with the models of human capital investment and training that we have covered in class.
- b) Notice that earnings level off at later ages. Give an explanation for this feature of the profiles that is consistent with the models of human capital discussed in class.
- c) Notice that the slopes are steeper for workers with higher levels of education. Does this indicate that formal schooling and on-the-job training are *compliments* or *substitutes*? What does this mean intuitively?
- d) Notice that the earnings profiles for women are flatter than those for men. Can you explain this in the context of human capital investment and on-the-job training? What do you think has been happening to the slope of earnings profiles for women over time?