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) (20 points) Explain
$$MPK^F = \frac{(r+d)p_k}{1-\tau}$$

- 2) (15 points) The book states that an increase in taxes can have to different effects upon the national savings. What are these two effects? Explain both of them.
- 3) (25 points each) Use the MPK^f/uc_K diagram to answer these questions. Explain why the curve(s) moved as drawn. What happens to the user cost of capital, the desired capital stock, and the amount of investment? Explain how you reached those conclusions.
- A) Capital becomes more productive.
- B) The depreciation rate increases.
- 4) (15 points) Explain why savings should equal investment. What is the implicit assumption we are making? Explain your logic.