

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.

Starting today, my Tuesday/Thursday office hours will change slightly. The 12:15 - 1:15 hours will now be 11:00 - 12:00 providing no committee meeting. I will still have office hours from 1:15 to 1:45. My office hours are posted on [my web page](#).

- 1) (15 points) Explain $uc_k = r \cdot p_k + d \cdot p_k$.
- 2) (20 points) Illustrate the effects of an increase in the government spending on the S/I diagram. Explain why the curve(s) moved as drawn. What happens to the interest rate and the level of investment?
- 3) (25 points) Illustrate the effects of an increase in the depreciation rate on the MPK^f/uc_k diagram. Explain why the curve(s) moved as drawn. What happens to the user cost of capital and the desired amount of capital? Why is the effect upon the amount of investment indeterminate?
- 4) (40 points) Illustrate the effects of an increase in GDP on both the MPK^f/uc_k diagram and the S/I diagram. Explain why the line(s) moved as drawn. What happens to the interest rate, the desired amount of capital, and the level of savings and investment?