

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) (15 points) Explain $r = \frac{i - \pi^e}{1 + \pi^e}$. Note that π^e has two effects, so explain both of them.
- 2) (15 points) Why should the *expenditure method* of calculating GDP give the same result as the *income method*? Why don't they? Explain your logic.
- 3) (10 points) Why does the level of saving equal the level of investment in a closed economy? Explain your logic.
- 4) (20 points) Draw the production function with capital on the axis. Illustrate the effects of an improvement in technology. Explain why the curve moved as drawn.
- 5) (20 points) Draw the NS/ND diagram. Illustrate the effects of an increase in capital. Explain why the curve(s) moved as drawn. What happens to the wage rate and the quantity of labor hired?
- 6) (20 points) Draw the production function with labor on the axis. Illustrate the effects of an increase in labor. Explain how your graph changed and what happens to the marginal product of labor.