

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 10 points. 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) (10 points) Explain $c = b_T y_T + b_P y_P$. Explain the two y 's and give estimates for the b 's and explain why those numbers make sense.

2) (25 points) Draw Modigliani's Life-Cycle model diagram. Back in 2002, the Bush administration mailed people a one-time tax refund check of \$500 (assuming you paid more than a certain amount). Illustrate the effects of that refund on the graph. Explain why the graph changed as drawn. What happened to the amount of consumption and saving done that year? Explain how your graph shows your conclusions.

3) (15 points) What is Ricardian Equivalence? Explain it using Friedman's Permanent Income Hypothesis.

4) (20 points) Draw the intertemporal budget constraint. Illustrate the effects of the tax refund discussed in Question #2. Explain why the curve moved as drawn. Explain how your graph can be used to show the effects upon saving and consumption this period.

5) (20 points) Draw the intertemporal budget constraint. Illustrate the effects of interest rates going down. Explain why the curve moved as drawn. Explain how your graph can be used to show the effects upon saving and consumption this period.

6) (10 points) In the equation for the real after-tax interest rate, r_{a-t} , I divided the right-hand side by $(1+\pi^e)$. Why did I do that?