

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) (25 points) Draw the S/D diagram for a good like gasoline which creates a negative externality. Use it to prove the market will not produce the optimal quantity. What method do economists feel is the best way to solve this problem? Illustrate the effects of that policy on the graph. Explain why the curve(s) moved as drawn.
- 2) (15 points) What is a public good? Why does that mean we need to have a government?
- 3) (15 points) What is a positive externality? Without using a graph, explain why it means that the market will not produce the optimal quantity.
- 4) (15 points) Explain why it may be more profitable to own a franchise even though it will cost you money to get the franchise.
- 5) (15 points) What is the equation for utility maximization? Prove that it makes sense.
- 6) (15 points) Do you think the income effect or the substitution effect is more closely related to the elasticity of demand? Explain your logic.