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.

- 1) (30 points) Draw the supply and demand diagram for a product whose use creates pollution, like gasoline. Prove that the market will not provide the socially optimal level of production. What solution to this problem do economists propose? Illustrate that solution on the graph. Explain why the curve(s) moved as drawn. Why does this policy bring optimality?
- 2) (10 points) Comcast Cable and Time Warner Cable are the two biggest cable companies. If they merge and Comcast does not shed any of their current holdings, then the new company will have more than a 30% market share. Given what we learned this week, do you think the merger should be allowed? Explain your logic.

(http://dealbook.nytimes.com/2014/02/12/comcast-set-to-acquire-time-warner-cable/?_php=true & type=blogs& r=0)

- 3) (15 points each) For each of these, explain why it is an economic argument for having a government.
- A) To have a legal system.
- B) Public goods.
- C) Income redistribution (The book says it is a non-economic argument, but I say it is also an economic argument.)
- 4) (15 points) Give an example of how voting could give an outcome which is better for society than the market would give.