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) (25 points) Draw the supply and demand for a good like gasoline which produces a negative externality. Use the diagram to prove the market will not produce the socially optimal quantity of gasoline. How do economists propose solving this problem? Illustrate that on the diagram and explain why the diagram changed as drawn and explain that policy results in the optimal production of gasoline.
- 2) (15 points each) For each of these, explain why it is an economic reason for government. (Note, the book says one is a non-economic reason, but there is also an economic reason.)
- A) Public goods
- B) Income redistribution
- C) Legal system.
- 3) (30 points) Explain the differences between spending and voting. In your explanation, give an example where the market will give a better result (from society's point of view) than voting and give an example where voting will give a better result.