

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) (30 points) Draw the supply and demand diagram for a good which creates a positive externality. Prove that the market will not produce the socially optimal amount of the good. What is the best solution from an economic point of view? Illustrate that on the graph. Explain why the curve(s) moved as drawn and prove that it will result in the optimal production of the good.
- 2) (15 points) Why is redistribution of income an economic reason for a government?
- 3) (25 points) Draw the supply and demand for carrots. Draw the result of a tax on carrots. Explain why the curve(s) moved as drawn. What happens to the price paid by consumers, the net price received by the firm, and the quantity sold?
- 4) (15 points) Explain why public goods are economic reasons for a government.
- 5) (15 points) Explain why providing a legal system is an economic reason for a government.