

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 supply and demand for a good like gasoline which causes a negative externality. Prove the market will not produce the optimal quantity at the optimal price. What do economists say should be done to correct this problem? Illustrate the effects of that on the diagram. Explain why the curve(s) moved as drawn.

2) (15 points each) For each of the following, explain why it is an economic reason for government. At least one of them is also a non-economic reason, but I want the economic reason.

A) Public goods.

B) Income redistribution.

C) Promote competition.

3) (15 points) Suppose there is a project which would have \$500 benefit to the organization which does it, and costs \$600 to that organization. There is also a positive externality of \$3 per person for 100 people. Should this project be done? Would the market do it? Would voting result in the project's being done? Explain your logic for all three parts.

4) (15 points) Suppose there is a project which would have \$1000 benefit to the organization which does it, and costs \$400 to that organization. There is also a negative externality of \$2 per person for 150 people. Should this project be done? Would the market do it? Would voting result in the project's being done? Explain your logic for all three parts.