

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 diagram for a good like gasoline, which creates a negative externality. Prove the equilibrium is not socially optimal. How do economists say this should be solved? Illustrate that on the graph. Explain why the curve(s) moved as drawn and prove the market then works efficiently.

2) (15 points) The book says that income redistribution is a non-economic reason for a government. I say it is an economic reason too. Explain my logic.

3) (20 points) Suppose there is a project which will cost \$3000. It will enable the organization who does the project to sell 1 item to each of 900 people at \$4 profit per item. There is a negative externality which affects 400 people and it costs each of them \$2 each. Should the project be done? Explain your logic. Would the market provide it? Explain your logic. Would the government provide it? Explain your logic.

4) (20 points) Suppose there is a project which will cost \$7000. It will enable the organization who does the project to sell 1 item to each of 1000 people at \$5 profit per item. There is a positive externality which affects 800 people and it benefits each of them \$3 each. Should the project be done? Explain your logic. Would the market provide it? Explain your logic. Would the government provide it? Explain your logic.

5) (20 points) Suppose there is a project which will cost \$2000. It will enable the organization who does the project to sell 1 item to each of 700 people at \$4 profit per item. There is a negative externality which affects 900 people and it costs each of them \$1 each. Should the project be done? Explain your logic. Would the market provide it? Explain your logic. Would the government provide it? Explain your logic.