

Do not write your name on the assignment. Write your name only on the back of this sheet of paper and staple your answers on the front of this sheet of paper. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to follow these directions will cost you 1 point on the assignment and failure to type it will cost you 10 points.

1) (30 points) Draw a supply and demand diagram for gasoline. Does the use of gasoline cause a negative or positive externality? Use the graph to prove the wrong amount of gasoline would be used if there was no government intervention. What can the government do to correct the problem? Illustrate that on the graph and explain how that corrects the problem.

2) (30 points) Draw a supply and demand diagram for gardens. Does planting of a garden in your front yard cause a negative or positive externality? Use the graph to prove the wrong number of gardens would be grown because there was no government intervention. What can the government do to correct the problem? Illustrate that on the graph and explain how that corrects the problem.

3) (20 points) Suppose the tax brackets are the same as the ones given on page 110. If you are single and have a taxable income of \$100,000.00, then what are your marginal tax rate, total tax bill, and average tax rate? Show all work and briefly explain how you reached the numbers.

4) (10 points each) Explain why each of the following are an **economic** reason for government intervention into the market.

- A) Income redistribution
- B) Imperfect competition.