Wilf Csaplar Jr.   Economics 202   Homework #4   **Due Thursday 9/21 by 2:00 PM**

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) (15 points) The article below has a non-economists definition of a public good. What is the correct definition in this course? In the section, "What Counts As a Public Good?", it lists at least one item which is not a public good. What in that list is not a public good? Explain why it is not a public good. https://www.investopedia.com/terms/p/public-good.asp

2) (15 points) The book lists "income redistribution" as a non-economic reason for having a government. However, I argue that up to a point, it is also an economic reason for having a government. Explain my logic.

3) (20 points) Suppose a factory costs $1000 to build. It will be able to make 500 items which can be sold for a profit of $3 per unit. (Assume each item is sold to a different person). The factory will affect 400 people <u>negatively</u>, hurting each person $2 each. Should the factory be built? Will the industry do it? Would the government do it? For all three parts, show all work and explain how you reached the conclusion.

4) (20 points) Suppose a factory costs $2000 to build. It will be able to make 500 items which can be sold for a profit of $3 per unit. (Assume each item is sold to a different person). The factory will affect 400 people <u>positively</u>, helping each person $2 each. Should the factory be built? Will the industry do it? Would the government do it? For all three parts, show all work and explain how you reached the conclusion.

5) (20 points) Suppose a person is earning $50,000 this year and facing the tax table to the right. Calculate their marginal tax rate, total taxes paid, and average tax rate. Show all work. If there is no work, briefly state how you reached each conclusion.

6) (10 points) I argued that most sales tax are regressive. Explain my logic.

Income Bracket	Tax Rate
$0 - $10,000	5%
$10,000 - $40,000	20%
$40,000 - $70,000	25%
$70,000 - $100,000	30%
>$100,000	35%