

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) (20 points) Suppose a factory will cost \$5000 to rent for a year. It will be able to make hats at a cost of \$40/hat. They will be able to sell 900 hats (each to a different person) at \$50/hat. The factory causes a negative externality which hurts 800 people \$6 each. Should the project be done? Will the market do it? If the government was asked to do it, would they do it? For all three parts, show all calculations and explain your logic.

2) (20 points) Suppose a factory will cost \$7000 to rent for a year. It will be able to make coats at a cost of \$50/coat. They will be able to sell 300 coats (each to a different person) at \$70/coat. The factory causes a positive externality which benefits 400 people \$3 each. Should the project be done? Will the market do it? If the government was asked to do it, would they do it? For all three parts, show all calculations and explain your logic.

3) (20 points) What are the two long-term trends which will cause the Social Security Trust Fund to run out of money? The article below gives a reason, but I am asking for the two causes of the reason they give. According to the article, if Congress does nothing, what will happen to the money retired people get? According to the article, will President Trump's deportation of illegal aliens help reduce the problem with Social Security or make the problem worse? Explain the logic. <https://www.aarp.org/social-security/myths-misconceptions-explained/>

4) (15 points) One of the proposals to save Social Security is to reduce benefits for all people. How would that reduce the problem? If you were President of the USA, would you use that as part of the solution to the Social Security problem? Explain your logic.

5) (15 points) One of the proposals to save Social Security is to means test benefits for all people. How would that reduce the problem? If you were President of the USA, would you use that as part of the solution to the Social Security problem? Explain your logic.

6) (10 points) Usually, increasing a tax rate will increase the revenue from that tax. However, that is not always true. Explain how increasing a tax rate can cause less revenue to come in. Make sure your explanation applies to all taxes.