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) Use one of the supply and demand diagrams we had in class, to explain the first section of the article found at https://www.practicalecommerce.com/network-effects-drive-ecommerce-marketplace-growth
2) (30 points) Draw an indifference curve/budget constraint diagram for potatoes and steak. Draw an increase in the price of potatoes. Draw the movement such that potatoes are Giffen Goods. Explain why the curve(s) moved as drawn. Explain how your graph shows that potatoes are Giffen Goods. Draw the necessary lines to find the income and substitution effects. Explain how you found the two effects and how you know that potatoes are inferior goods.
3) (25 points) Suppose that only three people want to buy presidential seals. Biden's demand curve is given by $\mathrm{Q}=6-\mathrm{P}$. Trump's demand curve is given by $\mathrm{Q}=12-\mathrm{P}$. Obama's demand curve is given by $\mathrm{Q}=6-2 \mathrm{P}$. Draw all three demand curves. Use that to draw the industry demand. Tell me how you got the curve, especially all of the points where the demand curve changes slope.
4) (25 points) Suppose a demand curve is given by $\mathrm{Q}=10-1 / 2 \mathrm{P}$ and the supply curve is given by $\mathrm{Q}=\mathrm{P}-5$. Draw the two curves and calculate the consumer surplus. Show all work and briefly state what you did.
