Wilf Csaplar Jr.   Economics 304   Homework #5   **Due Tuesday 2/28**

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 this assignment 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) (5 points) For a private value auction, when would a Dutch auction be the best type of auction from the seller's point of view? Explain your logic.

2) (15 points) Prove that for a private value auction, an oral, first-price, English auction will give the same expected revenue as a sealed bid, second-price auction.

3) (15 points) Why might a person running a sealed bid auction want to run a second-price auction rather than a first price auction? Explain your logic using a numerical example.

4) (15 points) Explain the winner's curse. In other words, what type of auction will have it and why it occurs.

5) (5 points) What type of auction is the auction at the link below? How did you reach that conclusion? (Of interest, if you bid $1, it will end up costing you $20,001.00.)
https://www.mlive.com/news/saginaw-bay-city/2023/02/bay-citys-historic-st-joseph-church-up-for-auction-and-the-bidding-starts-at-1.html

6) (20 points) Draw the MRP_L graphs for a perfectly competitive firm and for a price setting firm. Explain why one of them is steeper than the other. Why is a firm willing to pay MRP_L? Explain your logic.

7) (25 points) Draw the MRP_L graph for a firm with variable capital with a given wage. Suppose they lower their wage. Illustrate how the MRP_L would move. Explain why it moves that way. Use that to find the demand curve for labor. This graph assumes that the final product market is perfectly competitive. Why might it be different for any price setting firm? Explain your logic.