Wilf Csaplar Jr. Economics 163 Homework #3 **Due Friday 2/1**

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) Suppose that at a price of $20/hat the firm sells 40 hats. At a price of $30/hat they sell 20 hats. Find the price elasticity of demand for hats using both the point formula and the arc formula. Show all work and tell me which is the arc formula and which is the point formula. What do those numbers tell you about the elasticity of demand? Explain your logic.

2) (25 points) Draw the supply and demand for landline phones. Illustrate the effects of a decrease in the price of cell phones. Explain why the curve(s) moved as drawn. What happens to the price charged for landline phones, the quantity sold, the consumer surplus, and the producer surplus? Briefly state how you got each answer.

3) (25 points) Draw the supply and demand for computers. Illustrate the effects of a decrease in the price of computer chips. Explain why the curve(s) moved as drawn. What happens to the price charged for computers, the quantity sold, the consumer surplus, and the producer surplus? Briefly state how you got each answer.

4) (25 points) Draw the supply and demand for desks. Illustrate the effects of an increase in the price of doors. Explain why the curve(s) moved as drawn. What happens to the price charged for desks, the quantity sold, the consumer surplus, and the producer surplus? Briefly state how you got each answer.

5) (10 points) What is the biggest determinant if a good has an elastic or inelastic demand? What would make it elastic? Explain your logic.