Wilf Csaplar Jr. Economics 477 Homework #5 **Due Thursday 9/19**

The Last One!

Slide your assignment under my office door by the time class is scheduled to end, i.e. 4:20.

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. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

Show all work for all questions.

1A) (25 points) Suppose the Cournot industry demand curve is written as $P = 710 - (Q_1 + Q_2)$. Each firm's total cost curve is given by $TC_i = 10 + 10Q_i + 2Q_i$. Find the profit equation and use it to find each firm's best response function. Use that to find both the price, quantity sold, and profits for each firm.

B) (25 points) Find the Von Stackleberg price, quantities produced by the two companies, and profits for each firm.

2A) (25 points) Suppose the Cournot industry demand curve is written as $P = 12 - \frac{1}{4}(Q_1 + Q_2)$. Each firm's total cost curve is given by $TC_i = 10 + 2Q_i + \frac{1}{8}Q_i$. Find the profit equation and use it to find each firm's best response function. Use that to find both the price, quantity sold, and profits for each firm.

B) (25 points) Find the Von Stackleberg price, quantities produced by the two companies, and profits for each firm.