By this point you should be able to see that the Econ 391 model of competitive equilibria that are, under certain assumptions, Pareto efficient is one possibility. But in the real world around us optimizing consumers and firms are doing their utmost to acquire monopoly and/or monopsony power, and they use that power to further their objectives. These actions can lead to many different equilibria, a very few of which we have examined — monopoly/monopsony with and without price discrimination. As a student you are trying to build your monopoly power in the labour market. And, when you go into a store and haggle with the seller over the price, you are using your monopsony power. In settings where general equilibrium analysis is required e.g. understanding the tariff and non-tariff barriers that countries create, we see countries attempting to augment their monopoly and monopsony power in the markets that matter to them. Countries typically want to turn the terms of trade in their favour — they use their monopoly power to raise the prices of goods and service they export and they use their monopsony power to reduce the prices of goods and services they import.

One feature of the world that gives retailers some monopoly power is location. If you need a loaf of bread you may go to the corner store to buy it rather than drive to Costco where the same bread might be cheaper. This week we examine models where location offers some monopoly power to a retailer. These models have been extended to look at how candidates for political office may choose their position on the policy spectrum; we look at some of these models as well.

Assignment 3: please follow the submission rules on the course outline and email me your answers before noon Friday May 29th.

For questions 1, 2 and 3 do Workouts questions 25.9, 25.10 and 25.11. Question 25.9 starts on page 313.

4. This is an extension of Workouts problem 25.9. The “town” comprises people uniformly distributed along a line 30 miles long, with 100 people per mile. Travel costs are 1 dollar per person per mile. There is one bowling alley located at mile 10 and another located at mile 20. All customers are willing to pay up to 15 dollars for a night of bowling. The marginal cost of caring for a customer while at the bowling alley is 3 dollars. Ignore the fixed costs of the bowling alley — set them equal to zero. There is price competition between the bowling alleys in this question. Be careful with the demand function for each bowling alley in part (a) and think about how price competition will determine the equilibrium in (b).
(a) Assume customers pay their own transport costs to the bowling alley and each bowling alley acts to maximize its profits. Calculate total consumers’ surplus and the total profits of the two bowling alleys.

(b) Now assume the bowling alleys pay transport costs for their customers, and again, each bowling alley acts to maximize its profits. Calculate total consumers’ surplus and the total profits of the two bowling alleys.

(c) Is the setting in either (a) or (b) Pareto efficient? Defend your answer.