Youngberg

Econ 280

**Homework 02—Key**

Answer all the following on a ***typed, stapled*** (if applicable)separate sheet of paper. You do not need to type equations and graphs. I charge 25 cents to staple your homework. Make sure that you justify your answers, use your own words, and show your work. All questions are equally weighted.

1. In the following pairs of goods, indicate which good in the pair has the more elastic ***supply*** curve. Justify your answer.

|  |  |  |
| --- | --- | --- |
| a) | Microwaves next week | Microwaves next month |
| b) | iPhone | Calculator |
| c) | All sedans | Toyota Camry |
| d) | Potatoes in Dublin, Ireland | Potatoes in Europe |

1. *Microwaves next month have a more elastic supply curve. With more time, the producer can more easily adapt to changes in price (order more materials, fire workers, etc.).*
2. *Calculators have a more elastic supply curve. Even an advanced calculator won’t have as difficult-to-find components as an iPhone. The labor needed to assemble the iPhone is probably harder to find as well. Thus the inputs aren’t as easily available for an iPhone compared to a calculator.*
3. *The Toyota Camry—which is a type of sedan—has a more elastic supply curve than all sedans because the assembly line will be more flexible. It’s much easier to switch between types of sedans than it is to switch between a sedan and a non-sedan (like a truck).*
4. *Potatoes in Dublin would have a more elastic supply curve because there are more places to bring potatoes from (or transport them to) if the price changes. For all of Europe, those changes become harder since there are fewer places to pull potatoes from (or take them to).*
5. Shannon runs the charity Good Housekeeping which focuses on removing unseemly homes (thereby increasing the value of the other homes in the neighborhood). Each year, her charity purchases dozens of poorly kept homes from existing buyers and demolishes them, leaving a pleasant green space in its place for resale to an owner with better taste. Good Housekeeping’s slogan? “Like a good neighbor, we remove the bad ones.” How successful will Good Housekeeping be in removing unseemly homes from neighborhoods? Justify your answer using elasticity of supply.

*Good Housekeeping is not very successful because the elasticity of supply of poorly kept homes is very elastic. Trying to sell your house? Simply trash it and Good Housekeeping might just buy it from you. In their attempt to reduce the number of ugly homes, GH might increase them as people respond to them shifting the demand for ugly homes outward.*

1. Provide an example of each degree of price discrimination. ***Briefly*** justify your answer. Do not use examples from class or the textbook!

*1st Degree. Airplane manufacturers engage in first degree price discrimination. Airplanes are such large purchases, each purchase is negotiated separately (or, if you’re buying several, as a group) and there’s plenty of incentive for the manufacturer to learn a lot about the buyer. Using this information in negotiations allow companies like Boeing to charge close to each customer’s reservation price.*

*You could also argue that Borders engaged in 1st degree price discrimination as it was going out of business. At first, its prices were 50% off. Without promises of getting new inventory, people had a strong incentive to buy it if it was even just slightly less than their reservation price. Then prices were 60% off, then 75%, etc. Since it’s risky to wait for a lower price (because there’s no new inventory coming in), Borders probably got very close to perfect price discrimination.*

*2nd Degree. McDonald’s engages in 2nd degree price discrimination when it sells chicken nuggets. Buying a few chicken nuggets cost more per nugget than buying several chicken nuggets at once. Because of diminishing marginal returns, customers are less willing to pay for the 10th nugget than the 1st; this is a way of accounting for that increased sensitivity and thus enables them to sell more nuggets. By charging less for additional nuggets, McDonalds lowers its price the more nuggets you buy.*

*3rd Degree. Book sellers engage in 3rd degree price discrimination when they charge much more for hardcover books than for paperbacks (the production costs are virtually the same). Those who have a high willingness to pay—book fanatics—will buy a book shortly after it’s released. People with a more elastic demand curve prefer to wait until it hits paperback, thus paying a much lower price than those with a more inelastic demand curve.*

1. Consider this passage on French railways in the mid 1800s:

Hence, a good many people, on seeing travelers in third class, traveling without a roof over the carriage, on poorly upholstered seats, they denounce the barbarity of the railways. It would cost very little, they say, to put some meters of leather and kilos of horse-hair [on the seats], and it is beyond greed to withhold them.

It is not because of the several thousand francs which they would have to spend to cover the third class wagons or to upholster the benches that a particular railway has uncovered carriages and wooden benches; it would happily sacriﬁce this for the sake of its popularity. Its goal is to stop the traveler who can pay for the second class trip from going third class. It hurts the poor not because it wants them to personally suffer, but to scare the rich.

—Jules Dupuit, 1849

Dupuit notes that accommodations in third class are purposely made worse in order to “scare the rich.” How does this interpretation of railway operations illustrate price discrimination?

*By making it more costly for those willing to pay a lot to get a cheap ticket (making the ticket less valuable by removing creature comforts the wealthy would never go without but the poor would tolerate), the railway maintains separation between the two markets.*

1. For each of the following examples of price discrimination, indicate which type of price discrimination it most resembles (see Lecture 5). Justify your answer with ***no more*** than two sentences.
   1. Buying chapters assembled as a textbook rather than buying them individually.
   2. Charging more for electricity during times of the day when energy demand is high.
   3. Getting Adobe Acrobat Reader for free while being charged for the advanced version.
   4. Costco charging a flat rate to buy from their store and then separately charging customers for each item they buy.
2. *This is an example of bundling. If you want more copies of chapter 3, for example, you have to buy all the other chapters the book comes with.*
3. *This is an example of peak-load pricing. By charging more when the demand is high—a peak time—the power company charges more to people with a high willingness to pay.*
4. *This is an example of cross-subsidy. By giving away the Reader for free, the firm is not only enhancing the value of the advanced version but also ensuring only customers with a low willingness to pay will use it (because it is a stripped down version of the more advanced program).*
5. *This is an example of tying. By requiring people purchase membership and then charging them for each item they purchase, Costco ties two different products (membership and goods) together.*