

Homework #1
ECNS 204 (Snowmester 2020)

Note: I will not be collecting and grading homework assignments. Work through these problems to better prepare of the weekly quizzes, the midterm, and the final.

1.) Many people choose to work “graveyard” shifts, for example midnight to 8 a.m., because the work during those hours usually pays more than the usual “9 to 5” shifts. How does this illustrate the economic postulates? (Silberberg and Ellis 6th ed., Ch. 2, #5)

2.) Wages are higher in the Midwest region of the United States than on either coast. For example, a particular job in St. Louis pays, on average, more than the same job in San Francisco of New York. Explain this in terms of the postulates. (Silberberg and Ellis 6th ed., Ch. 2, #6)

3.) On Super Bowl Sunday, some corpulent gentlemen hurl themselves at an ovoid of pigskin. For these exertions, they earn more than most people make in a year, even those who provide a vital service, such as nurses, teachers of economics, etc. Does this mean society values football players more than nurses or teachers? (Silberberg and Ellis 6th ed., Ch. 2, #8)

4.) Aron’s marginal values of hamburgers and French fries, per week, are as follows:

<u>Quantity</u>	<u>Hamburgers</u>	<u>French fries</u>
1	\$10	\$6
2	8	5
3	6	4
		etc.

Joe’s Eats charges \$4 for hamburgers and \$1 for fries. Jake’s Eats charges \$2 and \$3, respectively, for the same quality burgers and fries.

- a.) Where does Aron eat, assuming he can’t buy burgers in one place and fries in the other? How many burgers and fries does he eat per week?
- b.) Joe’s decides to institute a new pricing policy: 1 burger and 1 order of fries must be purchased together. How much would Aron be willing to tip the waitperson per week in order to be able to buy burgers and fries separately, if he eats at Joe’s?
(Silberberg and Ellis 6th ed., Ch. 2, #16)

5.) A student spends weekday evening socializing and crams for the Monday morning exam on Sunday night. How do these actions illustrate the behavioral postulates? (Silberberg and Ellis 6th ed., Ch. 2, #18)

6.) The following are demand curves of representative consumers in the Pacific NW for electricity and salmon, in suitable quantity units:

		Salmon							
P	\$18	16	12	10	8	6	4	2	
Q	1	2	3	4	5	6	7	8	

		Electricity							
P	\$10	9	8	7	6	5	4	3	
Q	1	2	3	4	5	6	7	8	

Environmentalists want to allow more water to bypass the generators on the Columbia River so as to allow more salmon to reproduce. However, this raises the cost of electricity. Suppose this policy would raise the price of electricity from \$5 to \$7 and lower the price of salmon from \$10 to \$8. Are these consumers better off with this policy? (Silberberg and Ellis 6th ed., Ch. 2, #29)

7.) Chris and Pat are identical twins, but Chris is clean and neat while Pat is a slob. They have the same tastes, being identical twins, and their Marginal Values of hamburgers, in terms of hamburgers consumed per month are as follows:

Q	1	2	3	4	5	6	7
MV	\$12	\$10	\$8	\$5	\$3	\$1	\$0

Because Pat is a slob, the only hamburger proprietor in town charges Pat \$8 for hamburgers instead of \$3, which the proprietor charges everyone else. How much would it benefit Pat per month to clean up? (Silberberg and Ellis 6th ed., Ch. 2, #32)

8.) The Gallatin National Forest in SW Montana is considering closing the road up Hyalite Canyon during the winter months. This road provides access to one of the premier ice climbing venues in the United States. If the road is closed, then those without snowmobiles will be unable to ice climb at Hyalite. Consider Seth, an avid Hyalite climber who does not own a snowmobile. On average, it costs Seth \$30/day to climb at Hyalite (assume this includes all costs, i.e. forgone wages, gas, etc.). Seth's MV schedule for days of ice climbing this season is as follows:

<u># of days</u>	<u>MV</u>
1	250
2	200
3	175
4	150
5	120
6	100
7	80
8	70
9	50
10	30
11	10
12	0

a.) If the road remains open, how many days would Seth climb this season? What would his total expenditures be?

b.) Now assume that the Forest Service closes the road. Seth can no longer go ice climbing. What is Seth's loss?

9.) On a recent trip to Bozeman, Penny stopped off at Dave's Sushi for lunch because she heard that the average quality of the King salmon sushi rolls served at Dave's was higher than that of most restaurants in the Pacific Northwest. She found this rumor to be quite peculiar seeing that King salmon do not live in Montana. However, after eating at Dave's Penny agreed that the quality of salmon was higher than that of most Seattle restaurants she had previously eaten at. Give an economic explanation for this observation that is supported by a simple numerical example.

10.) The elasticity of demand for coffee is estimated to be -0.16 . If the quantity demanded was 4 billion lbs. per year when the price is \$3.60 per lb., how much coffee would be demanded at \$2.40 per lb.? Make sure to show your work. No work, no points. (Silberberg and Ellis 6th ed., Ch. 3, #19)

11.) a.) The elasticity of demand for 16 centimeter-in-length Black Diamond ice screws is -1.5 . If the quantity demanded is 5,000 ice screws per year when the price is \$60 per ice screw, then how much would the price per ice screw be if the quantity demanded was 7,500 ice screws per year?

b.) Are generic 16 centimeter-in-length ice screws more elastic or more inelastic than 16 centimeter-in-length Black Diamond ice screws?

12.) Aron spends his entire income on hamburgers and pizza. His demand for hamburgers is inelastic. If the price of hamburgers increases, what happens to the amount of pizzas he buys? When there are only two goods, can you state a rule about the effect of a change in the price of one good on the amount of the other good purchased? (Hint: You must consider the elasticity of demand of the good whose price has changed.) (Silberberg and Ellis 6th ed., Ch. 3, #25).