

Problem Set Six

Name _____

Chapter 8

3. John Jones owns and manages a café whose monthly revenue is \$5,000. Monthly expenses are:

Labor	\$2,000
Food and drink	500
Electricity	100
Vehicle lease	150
Rent	500
Interest on loan for equipment	1,000

a. Calculate John's monthly accounting profit.

b. John could earn \$1,000 a month elsewhere. However, he prefers to run the café. In fact, he would be willing to pay up to \$275 per month to run the café rather than do anything else. Is the café making an economic profit? Should John stay in the café business? Explain.

c. Suppose the café's revenues and expenses stay the same, but John can now earn \$1,100 a month elsewhere. Is the café still making an economic profit? Explain.

d. Suppose John had not gotten a loan to buy equipment, but had invested his own money. How would your answers to parts a and b change?

e. If John can earn \$1,000 a month elsewhere in a job he likes just as well as running the café, how much additional revenue would the café have to collect each month to earn a normal profit?

4. The city of New Orleans has 200 advertising companies, 199 of which employ designers of normal ability at a salary of \$100,000 a year. Paying this salary, each of the 199 firms makes a normal profit on \$500,000 in revenue. However, the 200th company employs Janus Jacobs, an unusually talented designer. This company collects \$1,000,000 in revenues due to Jacob's talent.

a. How much will Jacob's earn? What proportion of his annual salary will be economic rent?

b. Why won't the advertising company for which Jacob's works be able to earn an economic profit?

5. Explain carefully why, in the absence of patent, a technological innovation invented and pioneered in one tofu factory will cause the supply curve for the entire tofu industry to shift to the right. What will finally halt the rightward shift?

6. The government of a developing country has decided to limit imports of machine tools, to encourage the development of locally made machine tools. To do so, the government offers to sell a small number of machine-tool import licences. To operate a machine-tool import business costs \$30,000, excluding the cost of the import license. An importer of machine tools can expect to earn \$50,000 per year. If the annual interest rate is 10 percent, how much will the government be able to auction the import licenses? Will the owner of a license earn an economic profit?

8. You have a friend who is a potter. He holds a permanent patent on an indestructible teacup whose sale generates \$30,000 a year more revenue than production costs. If the annual interest rate is 20 percent, what is the market value of this patent?

9. You have an opportunity to buy an apple orchard that produces \$25,000 per year in total revenue. To run the orchard, you would have to give up your current job, which pays \$10,000 per year. If you find both jobs equally satisfying, and the annual interest rate is 10 percent, what is the highest price you would be willing to pay for the orchard?

On my honor, as an Aggie, I have neither given nor received unauthorized aid on this assignment.

Signature _____