ECON 103, Fall 2009 Simon Fraser University

## **Assignment 4** Due in tutorials in the week of November $30^{th}$ .

Each question is worth 5 marks, 20 marks in total.

- 1. Answer the following questions. Use diagrams to demonstrate your answers.
  - (a) Explain why a monopoly that charges single price produces less than a competitive firm and results in an inefficient outcome.
    Suggested outline of your answer: explain how a monopoly and a competitive firm maximize profits, explain why profit maximizing output is different for these firms; argue whether a monopoly that sets a single price for its product will ever find it in its interest to produce same output as a competitive firm. Be clear and precise.
  - (b) Will monopoly always result in inefficient market outcome? If you think that yes, argue carefully why so. If you think that it is possible that monopoly will be efficient, explain under what circumstances it will be so.
- 2. Tetracycline is an antibiotic that is used to treat both humans and animals. The price of tetracycline for human use is higher than price of tetracycline for animal use. Why? For full marks use diagrams to demonstrate.
- 3. Do problem 10 from Chapter 13.
- 4. There are 10 people living in a small town. Each person's demand for rides in amusement park is P = 5 .5q, where q is the number of rides that a person demands at price P. There is one amusement park that has fixed cost FC = 50 dollars; marginal cost of a ride per person is zero.
  - (a) Find and plot on a diagram market demand for the the rides. If amusement park charges single price per ride, what are the profit maximizing price and number of rides? Demonstrate on a diagram. What is the profit of the amusement park?
  - (b) Now suppose that instead of charging single price the park wants to charge both entry fee and price per ride. What fee and price per ride will maximize park's profit? Explain shortly how this pricing strategy works. Calculate the profit the park will collect in this case. Use a diagram to demonstrate your answer.