

ECO 610
Fall 2016
Problem Set #8

1. You own and operate a bar close to the UK campus. After some experimentation, you determine that on any given Wednesday night the typical male patron has the following demand for beer: $q = 5 - P_B$. P_B is the price per beer and q is number of beers each male patron chooses to consume on any given visit to your bar. Your costs for beer are $MC = AC = \$1$.
 - a) What price per beer will maximize profit, how many beers will each patron consume, and what will you earn on each customer? Illustrate in a diagram.
 - b) Now, suppose you can charge an entry fee or cover charge to get in the bar. Would you set P_B differently? What cover charge would you set? What profits will you earn on each customer? Illustrate in the diagram.
 - c) Finally, let's consider how your overall pricing strategy affects the number of customers who come to your bar. Suppose $F = 50 - 10CV_F$ and $M = 35 + F - 5P_B - 2CV_M$, where F is the number of female customers, M is the number of male customers, CV_F is the cover charge for female patrons, and CV_M is the cover charge for male patrons. Discuss conceptually (don't calculate) how you might take these interactions into account in setting the price for beer and the cover charges for males and for females. Why might setting different beer prices for males and for females be problematical?