V18: Seminar 3 - Product differentiation

ECON3820/ECON4820 - Strategic Competition

March 2nd 2018

Problem 1

Excercise 7.3 from Tirole's book.

Problem 2 (based on an exam question from 2006)

1. Present a model of duopoly with identical firms where, in the unique equilibrium, price equals marginal cost. Explain why this is so.
2. What would be the outcome in the above model if firms had different technologies and therefore different costs?
3. When we set out to study a particular industry, we need to make a choice whether to assume price competition or quantity competition. Discuss features of the industry that could come into consideration in this modelling choice.

Problem 3 (based on an exam question from 2016)

For each of the following statements, discuss whether the statement is always true, true under some conditions, or always false.

(Total points: 80)

a. (10 points) When firms are capacity constrained, equilibrium prices are above marginal costs.

b. (15 points) When products are horizontally differentiated, firms tend, in equilibrium, to offer products that are too similar relative to social optimum.

c. (10 points) Collusion is more prevalent the more patient firms are.

d. (15 points) Even if firms cannot observe each other's prices, they may still be able to collude.