

EE481: Industrial Economics
Semester 2/2016
Assignment 2: Bertrand Model (1883)
The due date: Friday 17 February 2016 in class
*****Before lecture begins*****

Instructions

1. Form a group of two. Discuss and solve the problem together.
2. Plagiarism is an academic crime. If detected, zero point will be given.
3. Read the issue of Capacity Constraints in Bertrand's Model: Edgeworth's Model (Chapter 6, Page 198-200)

Problem

Concerning our discussion on Bertrand's Model, with market demand function is $P = 1 - 0.001Q$ and $c = 0.28$, do the following tasks

1. Draw the market demand curve and marginal costs curve.
2. With capacity constraints as described in the textbook
 - draw the new marginal cost curve
 - find the firm 1's residual demand curve
 - solve explicitly for quantity that firm 1 would produce and for price that it may charge.
 - fully proof that p_1 computed above is not in an equilibrium either. (Make it more clear than what it is explained in the textbook!)
 - show that there is no single price static equilibrium.