

ECON 321, Class 11: Engel, Fischer, and Galetovic

Read section 1 and section 2 carefully.

Read section 3 quickly.

Read section 4 quickly.

Focus on the example given at the top of page 7. Note that $B(Q) = 1 - q_1 - q_2$.

Let costs be $c_1(q_1) = 0.3q_1$ and $c_2(q_2) = 0.5q_2$.

Find the market flow into roads by substituting the above into equation (2) on pg. 3. (you get two equations, one for each road)

Find the demand functions for the 2 roads, either by solving the above or just plugging into the q_i equation on pg. 7.

Now maximize each road's profit $\Pi_i = p_i q_i$ with respect to p_i . You should get two reaction functions, and when you solve them simultaneously the results can be checked against the formula for p_i on pg. 7.

Given the Nash equilibrium prices, what is the quantity on each road, and what is the TMC?

Read the conclusion (section 6) and check that the logic matches what you just did.