Assignment 5

1. Consider a car producer selling its car through a dealer. They are both monopolist. The inverse demand for cars is given by $P=40-Q$. The total cost for the producer is $TC=15Q$. The dealer’s cost is given by the price paid to the producer ($w$) plus a unitary cost equal to 5.
   a. Find the price paid for by consumers for a car.
   b. What would be the price of a car if the two firms were vertically integrated? [Suppose the marginal cost for the vertically integrated firm is equal to 15+5]

2. Should the European Union outlaw the practice of exclusive territories in car dealerships? Why or why not?

3. Beer producers impose an exclusive dealing clause on retailers. Discuss the efficiency and market power effects of this practice.

4. Consider a homogeneous product industry with inverse demand function given by $P=100-2Q$. Variable cost is given by $VC=10q$. There is currently one incumbent firm and one potential competitor. Entry into the industry implies a sunk cost $F=50$.
   a. Determine the incumbent’s optimal output in the absence of potential competition
   b. What output should the incumbent set in order to deter entry?