## CALTECH

## Ec 11 Homework 8 Professor R. Preston McAfee Winter 2007



- 1. Suppose the inverse demand curve is p(Q) = 1 Q, and that there are *n* Cournot firms, each with marginal cost *c* selling in the market.
  - a. Find the Cournot equilibrium price and quantity
  - b. Determine the gross profits for each firm
- 2. What formula from the Cournot model is used in antitrust analysis? How is it used?
- 3. Consider *n* identical Cournot firms in equilibrium.
  - a. Show that the elasticity of market demand satisfies  $\varepsilon > 1/n$ .
  - b. Is this consistent in the case when n = 1 (monopoly)?
- 4. Describe how a principal would go about hiring agents who are willing to take risks.