Ec 11 Homework 6
Professor R. Preston McAfee
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CALTECH

1. Consider a monopolist with cost $c = 3q$
   a. If demand is given by $q = 50 - 2p$, what is the monopoly price and quantity? What are the profits?
   b. Repeat part a for demand given by $q = 10 / p$
2. The government wishes to impose a tax, of fraction t, on the profits of a monopolist. How does this affect the monopolist's optimal output quantity?
3. If demand has constant elasticity, what is the marginal revenue of the monopolist?
4. Determine whether the following are direct price discrimination, indirect price discrimination, or not price discrimination, and why
   a. Student discounts at local restaurants
   b. Financial aid at colleges
   c. Matinee discount at the movies
   d. Home and professional versions of Microsoft's operating system
   e. Lower airline fares for weekend flights
   f. Buy one, get one free specials
5. For each of the following, state whether you would expect peak load pricing to equalize the quantity demanded across periods or impose the entire cost of capacity on the peak period. Explain why.
   a. Hotels in Miami
   b. Electricity