

Chapter 15 Practice Problems

Elements of Microeconomics (discussion section 4)

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Question 1

Fill in the following table for a monopoly firm:

Q	P	TR	AR	MR
0	\$11		---	---
1	10			
2	9			
3	8			
4	7			
5	6			

Question 2

Assume that we have a monopoly firm in the market for internet. The market demand, average total cost, marginal cost for the firm, and marginal revenue for the firm is:

$$Q_D = 40 - 2P$$

$$ATC = \frac{50}{Q} + \frac{1}{4}Q$$

$$MC = \frac{1}{2}Q$$

$$MR = 20 - Q$$

- (a) Graph these curves.
- (b) Find the profit maximizing quantity for the firm (Q^M) and label it on your graph.
- (c) What is the socially optimal quantity (Q^E)? Label it on your graph
- (d) Calculate the profit for the firm and label it on your graph.
- (e) Calculate the deadweight loss in this market and label it on your graph.

Question 3

Give a real world example of price discrimination, and explain how it increases social welfare.