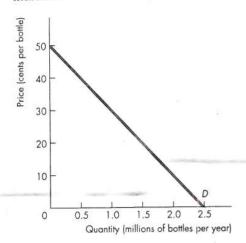
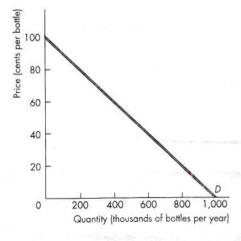
## PROBLEMS

\*1. Elixir Springs, Inc., is an unregulated natural monopoly that bottles Elixir, a unique health product with no substitutes. The total fixed cost incurred by Elixir Springs is \$150,000, and its marginal cost is 10¢ a bottle. The figure illustrates the demand for Elixir.

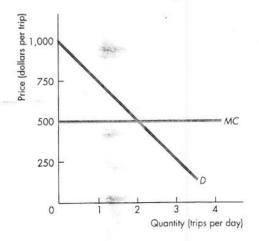


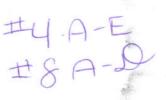
- a. What is the price of a bottle of Elixir?
- b. How many bottles does Elixir Springs sell?
- c. Does Elixir Springs maximize total surplus or producer surplus?
- Cascade Springs, Inc., is a natural monopoly that bottles water from a spring in the Rocky Mountains. Its total fixed cost is \$80,000, and its marginal cost is 5 cents a bottle. The figure illustrates the demand for Cascade Springs water.



- a. What is the price of Cascade Springs water?
- b. How many bottles does Cascade Springs sell?
- \* Solutions to odd-numbered problems are available on MyEconLab.

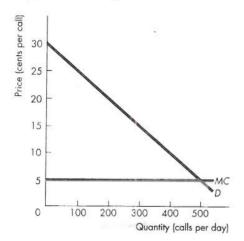
- c. Does Cascade Springs maximize total surplus or producer surplus?
- \*3. The government imposes a marginal cost pricing rule on Elixir Springs in problem 1.
  - a. What is the price of a bottle of Elixir?
  - b. How many bottles does Elixir Springs sell?
  - c. What is Elixir Springs' producer surplus?
  - d. What is the consumer surplus?
  - e. Is the regulation in the social interest? Explain. The government imposes a marginal cost pric-
  - ing rule on Cascade Springs in problem 2.
  - a. What is the price of Cascade Springs water?
  - b. How many bottles does Cascade Springs sell?
  - c. What is the economic profit?
  - d. What is the consumer surplus?
  - e. Is the regulation in the social interest? Explain.
- \*5. The government imposes an average cost pricing rule on Elixir Springs in problem 1.
  - a. What is the price of a bottle of Elixir?
  - b. How many bottles does Elixir Springs sell?
  - c. What is Elixir Springs' producer surplus?
  - d. What is the consumer surplus?
  - e. Is the regulation in the social interest? Explain.
- 6. The government imposes an average cost pricing rule on Cascade Springs in problem 2.
  - a. What is the price of Cascade Springs water?
  - b. How many bottles does Cascade Springs sell?
  - c. What is the economic profit?
  - d. What is the consumer surplus?
  - e. Is the regulation in the social interest or in the private interest?
- \*7. Two airlines share an international route. The figure shows the demand curve for trips on this route and the marginal cost curve that each firm faces. This air route is regulated.





- a. What is the price of a trip and what is the number of trips per day if the regulation is in the social interest?
- b. What is the price of a trip and what is the number of trips per day if the regulation is in the producer's interest?
- c. What is the deadweight loss in part (b)?
- d. What do you need to know to predict whether the regulation will be in the social interest or the producer's interest?

Two phone companies offer local calls in an area. The figure shows the demand curve for calls and the marginal costs curves of each firm. These firms are regulated.



- a. What is the price of a call and what is the number of calls per day if the regulation is in the social interest?
- b. What is the price of a call and what is the number of calls per day if the regulation is in the producer's interest?
- c. What is the deadweight loss in part (b)?
- d. What do you need to know to predict whether the regulation will be in the social interest or the producer's interest?
- \*9. Explain the difference between regulation and antitrust law. To what situations does each apply? Give an example of the use of each.
- 10. Describe the difference between the ways in which the two parts of the Sherman Act have been applied. Why do you think one part has been interpreted more strictly than the other?

## CRITICAL THINKIN

- 1. After you have studied *Reading Between Lines* on pp. 336–337, answer the follow questions:
  - a. What do twenty-two members of Co want to do that will affect the market pharmaceutical drugs?
  - b. Why do the drug companies want to discriminate?
  - c. If Congress made it legal to import pl ceutical drugs from Canada and Euro what would happen to the price of the drugs in the United States? What wou pen to producer surplus, consumer su and deadweight loss?

## WEB EXERCISES

## Use the links on MyEconLab to work the following exercises.

- 1. Visit the FTC and read the press release or consent order for the AOL–Time Warner
  - a. What conditions did the FTC impose it approved the merger?
  - b. What are the markets in which AOL–Ti Warner operates? Which of these market
- if any, are competitive and in which of th any, might AOL—Time Warner be a mor
  - c. Who benefits from the AOL-Time Winnerger? Draw a diagram that illustrate directions of the changes in price, outpureducer surplus, and consumer surpluyou think resulted from the merger.
- 2. Visit the FTC and read the press release o charge that Intel Corporation has abused monopoly position.
  - a. What does the FTC say that Intel did i lation of the antitrust law?
  - b. Do you agree with the FTC? Why or wh
  - Draw a figure that illustrates how Intel fited and others lost from its actions.
- Read the order issued by the court to brea Microsoft.
  - a. What exactly did the court order?
  - b. How do you think the software industr would have changed if the breakup ord been implemented?