Homework 5

Use the following to answer questions 1-2:

Table 10-1

FIRM	MARKET SHARE
A	25%
B	3%
C	44%
D	11%
E	8%
F	9%

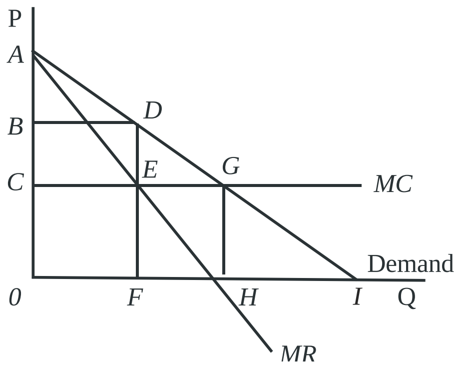
1. Table 10-1 indicates a four-firm concentration ratio of:
   A) 31%.
   B) 44%.
   C) 89%.
   D) 100%.
   E) not enough information to tell.

2. Table 10-1 indicates a Herfindahl-Hirschman Index of:
   A) 44.
   B) 100.
   C) 2763.
   D) 2836.
   E) none of the above.

3. The difference between a concentration ratio and the Herfindahl-Hirschman Index (HHI) as measures of market concentration is that:
   A) the concentration ratio captures the degree of monopoly power while the HHI captures the level of advertising for the firms.
   B) the concentration ratio places heavier weight on larger firms in the industry.
   C) the concentration ratio does not distinguish between an industry with several equal sized firms and an industry with one large dominant firm.
   D) the HHI cannot capture the existence of a monopolist.
   E) all of the above are true.

Use the following to answer questions 4-6:

Figure 10-1



4. If the market indicated by Figure 10-1 is perfectly competitive, the level of output and price will be, respectively:
   A) F, C.
   B) H, C.
   C) F, B.
   D) H, B.
   E) A, I.

5. If the market indicated by Figure 10-1 is monopolized by one large seller, the level of output and price will be, respectively:
   A) F, C.
   B) H, C.
   C) F, B.
   D) H, B.
   E) A, I.

6. Compared to pricing under perfect competition, which of the areas in Figure 10-1 represents the consumer surplus lost by consumers due to monopoly pricing?
   A) DEG.
   B) ACG.
   C) BCGD.
   D) BCED.
   E) OFEC.

7. The term "strategic interaction" refers to:
   A) the link between consumer welfare and industry cost curves.
   B) tacit agreements between the producers and the consumers of inputs.
   C) the fact that each firm's business strategy depends upon its rival's business behavior.
   D) the realization by oligopolists that higher selling prices imply lower sales.
   E) all of the above.

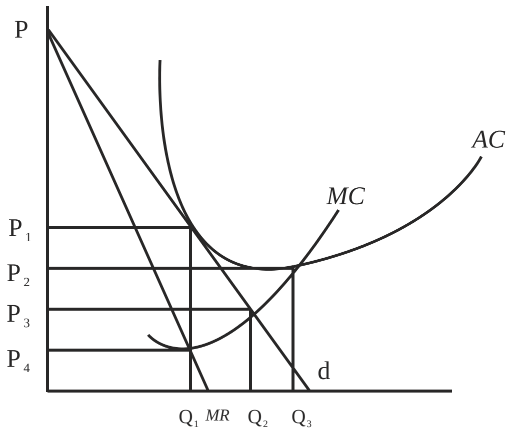
8. A cartel may be defined as:

A) a group of firms.
B) a group of monopolies.
C) a group of firms cooperating in regulating production and marketing so as to restrict quantity and fix price.
D) the vesting of the control of different corporations in a single one by the issue of stock of the controlling corporation in place of a majority of the stock of the others.
E) a business interest held by one firm for the benefit of the other.

9. Which of the following are examples of price discrimination?
A) a movie theater charges children less for tickets than is charged adults.
B) A pharmacy gives discounts to senior citizens.
C) An airline sets lower prices for passengers who stay over a Saturday night during their travels.
D) The price of a small drink at MacDonalds for senior citizens is zero.
E) All of these are examples of price discrimination.

Use the following to answer questions 10-12:

Figure 10-3



10. The imperfect competitor shown in Figure 10-3 should set a profit-maximizing level of output and price at:
A) Q_1 and P_1
B) Q_3 and P_2
C) Q_1 and P_4.
D) Q_2 and P_3
E) Q_3 and P_1.

11. An imperfect competitor whose cost and demand relations are as given in Figure 10-3:

A) is making losses.
B) is making economic profits.
C) is making no economic profits.
D) should shut down.
E) is none of the above.

12. The imperfect competitor shown in Figure 10-3:
A) could be in a long-run equilibrium situation for monopolistic competition, since P = AC.
B) must be in a long-run equilibrium situation for a monopoly, since P = AC.
C) should shut down, since profits are zero.
D) cannot be in a long-run equilibrium situation for monopolistic competition, since P is not equal to MC.
E) none of the above.

13. Which of the following helps cause perfect competition to produce a more efficient allocation of resources than monopoly?
A) Firms in perfect competition try to minimize cost while monopolies try to maximize profits.
B) Firms in perfect competition try to maximize output while monopolies try to maximize profits.
C) Firms in perfect competition try to set low prices while monopolies try to set high prices.
D) A firm in perfect competition has no control over the market price for its product while monopolies can gain from exploiting the gap between P and MC.
E) None of the above.

14. Monopolistic deviation from P = MC means that:
A) nobody can be made better off without making someone else worse off.
B) goods are being produced efficiently.
C) society is better able to achieve its welfare optimum.
D) someone can be made better off without making someone else worse off.
E) none of the above.

15. The supply curve for a monopolist is always:
A) more elastic than the supply curve for a perfect competitor.
B) less elastic than the supply curve for a perfect competitor.
C) more elastic than the market supply curve for a perfectly competitive industry.
D) steeper that the monopolist's average cost curve in the relevant region.
E) none of the above; the supply curve does not exist for a monopolist.

16. Any person who places larger value on gaining $2,000 than on losing $2,000 is:
A) risk averse, at least in the neighborhood of their current income.
B) risk loving, at least in the neighborhood of their current income.

C) risk neutral, at least in the neighborhood of their current income.
D) so poor that $2,000 is very important to them.
E) so wealthy that $2,000 means very little to them.

17. A given person is risk averse through all relevant levels of income. The expected utility of receiving an extra $5,000 with probability 0.5 and an extra $15,000 with probability 0.5 must be:
A) larger than the utility of receiving an extra $10,000 with certainty.
B) equal to the utility of receiving an extra $10,000 with certainty.
C) smaller than the utility of receiving an extra $10,000 with certainty.
D) larger than or equal to the utility of receiving an extra $10,000 with certainty, depending upon the initial level of income.
E) smaller than or equal to the utility of receiving an extra $10,000 with certainty, depending upon the initial level of income.

18. A given person is risk averse through all relevant levels of income. This person, facing the prospect of receiving an extra $5,000 with probability 0.5 and losing $5,000 with probability 0.5, would be willing to buy:
A) more insurance to avoid the risk than if the probabilities were 0.25 and 0.75 of receiving the extra $5,000 and losing $5,000, respectively.
B) less insurance to avoid the risk than if the probabilities were 0.25 and 0.75 of receiving the extra $5,000 and losing $5,000, respectively.
C) the same amount of insurance to avoid the risk as if the probabilities were 0.25 and 0.75 of receiving the extra $5,000 and losing $5,000, respectively.
D) no insurance to avoid the risk even if the probabilities were 0.25 and 0.75 of receiving the extra $5,000 and losing $5,000, respectively.
E) up to $10,000 in insurance if the probability of loss were sufficiently high.

19. What is the necessary condition(s) for efficient insurance markets?
A) Large number of insurable events.
B) Sufficient experience regarding events so that insurance companies can reliably estimate losses.
C) The insurance must be relatively free of moral hazard.
D) A and B are necessary conditions.
E) All of the above are necessary conditions.

20. Adverse selection may occur in insurance markets because:
A) only the rich are most likely to buy the insurance.
B) only the poor are most likely to buy insurance.
C) only the people with the highest risk are most likely to buy the insurance.
D) A and B are correct.
E) None of the above.

21. In reality, markets involving risk and uncertainty are plagued by market failures.

Market failure occur because:

A) adverse selection.

B) moral hazard.

C) profits cannot be made in the insurance industry.

D) A and B.

E) None of the above.

22. Moral hazard occurs when:

A) people with the highest risk are the most likely ones to buy insurance.

B) insurance reduces a person's incentives to avoid or prevent certain risky events.

C) the government refuses to provide social insurance.

D) risk is spread across markets and time by speculators.

E) none of the above.

23. To limit market power, the government may challenge horizontal merger among firms in the same industry. In U.S., for example, the Federal Trade Commission (FTC) or the Antitrust Division of the Department of Justice (DOJ) are empowered to file a lawsuit to prevent firms from merging into a single firm. Under their current Horizontal Merger Guidelines, these antitrust authorities view industries with Herfindahl-Hirschman indexes in excess of 1,800 to be "highly concentrated" and may attempt to block a horizontal merger if it will increase the Herfindahl-Hirschman index by more than 100.

Now suppose that an industry in the U.S. consists of three firms with sales of $200,000, $500,000, and $400,000.

a. Calculate the Herfindahl-Hirschman index (HHI).

b. Calculate the four-firm concentration ratio (C4).

c. Based on the FTC and DOJ Horizontal Merger Guidelines described above, do you think the Department of Justice would attempt to block a horizontal merger between two firms with sales of $200,000 and $400,000? Explain.

Chapter 10, Questions for discussion, page 209-210
Q2, Q4

Chapter 11, Questions for discussion, page 186
Q1, Q2