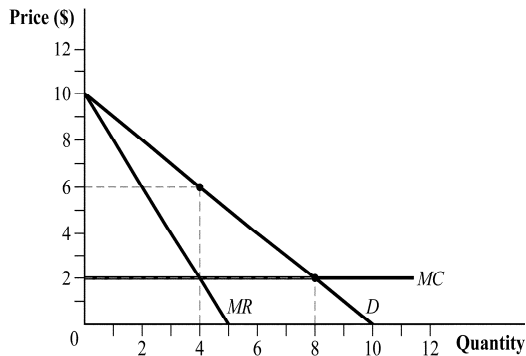


## Quiz #6 -- April 8, 2021

Use the following to answer question 1.

**Figure 10.1**



1. (Figure 10.1) Producer surplus under monopoly and under perfect price discrimination are \_\_\_\_\_ and \_\_\_\_\_, respectively.
  - A) \$16; \$32
  - B) \$24; \$48
  - C) \$8; \$12
  - D) \$32; \$12
  
2. Suppose that a night club's customers all have the same inverse demand curve for drinks,  $P = 7 - Q$ , where  $P$  is the price per drink and  $Q$  is the number of drinks. The marginal cost of a drink is \$1. With a two-part tariff pricing strategy, how much do customers pay to get into the nightclub?
  - A) \$8
  - B) \$12
  - C) \$6
  - D) \$18

Use the following to answer question 3.

**Table 10.4**

Scenario A		
	Golf Channel	History Channel
Harry	\$10	\$7
Stan	10	7

Scenario B		
	Golf Channel	History Channel
Shirley	\$12	\$15
Alec	8	10

Scenario C		
	Golf Channel	History Channel
Mike	\$9	\$4
Travis	7	8

Scenario D		
	Golf Channel	History Channel
Amy	\$6	\$8
Pam	10	11

3. (Table 10.4) The table shows consumer valuations (maximum willingness to pay per month) for two cable television networks. In which of the scenarios would a cable television company have an increase in producer surplus from using a bundling strategy as opposed to selling channel access separately?
- A) Scenario A  
 B) Scenario B  
 C) Scenario C  
 D) Scenario D
4. A rock-climbing school faces two demand curves. The demand by local residents is  $Q = 500 - 0.5P$ , and the demand by others is  $Q = 600 - 0.5P$ . The marginal cost of serving either local residents or others is constant at \$100. If the rock-climbing school segments the market, it will charge local residents and others a price of \_\_\_\_\_ and \_\_\_\_\_, respectively.
- A) \$400; \$600  
 B) \$450; \$550  
 C) \$550; \$650  
 D) \$225; \$275

5. Which of the following requirements is necessary to practice price discrimination?
- I. The firm must have market power.
  - II. The firm must be able to prevent arbitrage of its product.
  - III. The firm must face a perfectly elastic demand curve.
  - IV. The firm must operate in a perfectly competitive industry.
- A) II, III, and IV
  - B) I, II, and III
  - C) I and II
  - D) III and IV

Use the following to answer question 6.

**Table 10.3**

Consumer Valuations for Two Versions of Fender Stratocaster Guitars		
Consumer Type	American Standard Stratocaster	American Deluxe Stratocaster
Price-sensitive	\$1,100	\$1,250
Price-insensitive	1,200	1,800

6. (Table 10.3) Suppose that Fender is trying to practice indirect price discrimination through versioning. It plans to offer the cheaper American Standard version of its guitar for consumers who are highly price-sensitive and the more expensive American Deluxe version to those who are not. To be incentive-compatible Fender should charge \_\_\_\_\_ for the American Standard and \_\_\_\_\_ for the American Deluxe.
- A) \$800; \$1,599
  - B) \$900; \$1,001
  - C) \$999; \$1,499
  - D) \$1,119; \$1,750

Use the following to answer question 7.

**Table 11.2**

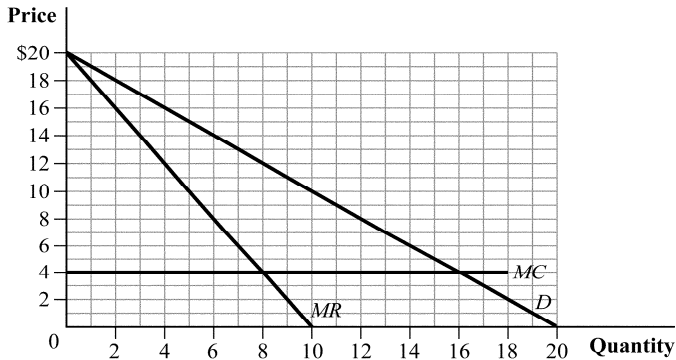
**Payoffs: University of Michigan's Football Revenue, Michigan State's Football Revenue**

		Michigan State University	
		Spend Lots on Recruiting	Spend Little on Recruiting
University of Michigan	Spend Lots on Recruiting	\$60 million, \$60 million	\$80 million, \$50 million
	Spend Little on Recruiting	\$50 million, \$80 million	\$70 million, \$70 million

7. (Table 11.2) The table shows the payoffs associated with two levels of spending for recruitment of star football players. What is the Nash equilibrium?
- A) Each school will spend a little money on recruiting.
  - B) Each school will spend lots of money on recruiting.
  - C) The University of Michigan will spend a little money on recruiting and Michigan State University will spend lots of money on recruiting.
  - D) There are two Nash equilibria: (1) both schools spend lots of money recruiting and (2) both schools spend little money recruiting.

Use the following to answer question 8.

**Figure 11.3**



8. (Figure 11.3) The graph depicts a four-firm industry with no fixed costs. Suppose that the four firms are colluding by acting like a monopolist, with each firm producing one-fourth of the market output. If one of the firms cheats on the cartel agreement and produces an additional unit of output, the profits of each of the compliant firms go from:
- A) \$36 to \$40.
  - B) \$16 to \$14.
  - C) \$8 to \$12.
  - D) \$18 to \$12.
9. A market is served by two firms in Cournot competition, each with a constant marginal cost of \$100. The market inverse demand curve is  $P = 2,000 - 50Q$ , where  $Q$  is the total market output produced by the two firms,  $q_1 + q_2$ . What is Firm 1's reaction function?
- A)  $q_1 = 19 - 0.5q_2$
  - B)  $q_1 = 210 - q_2$
  - C)  $q_1 = 400 - 0.2P$
  - D)  $q_1 = 400 - 100q_2$

10. In Cournot competition, the market inverse demand curve is  $P = 240 - 0.5Q$ , where  $Q$  is the total output produced by Firm A and Firm B,  $q_A + q_B$ . The marginal cost for each firm is constant at \$30. If Firm B produces 140 units of output, how much output should Firm A produce?
- A) 80
  - B) 140
  - C) 34
  - D) 90

## Answer Key - S21-6

1. A
2. D
3. C
4. C
5. C
6. C
7. B
8. B
9. A
10. B