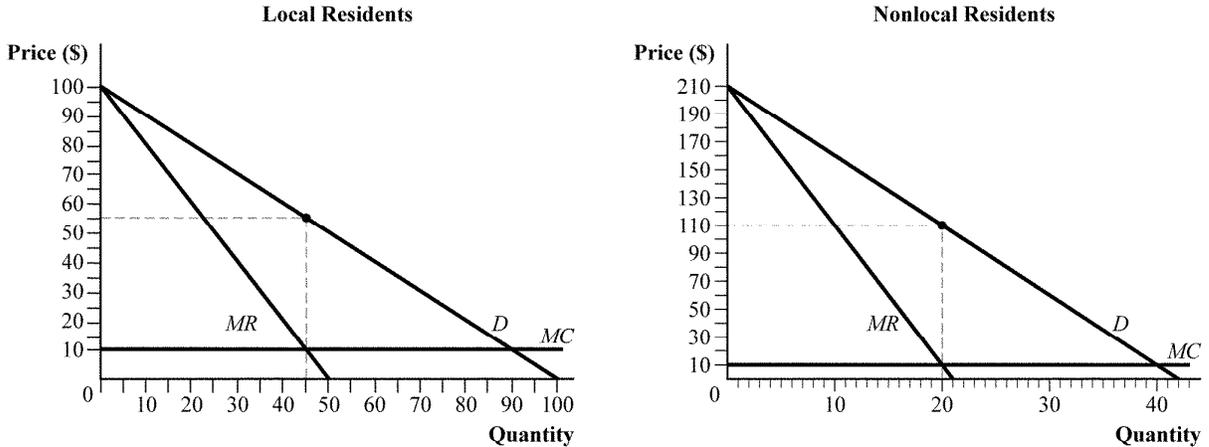


Quiz #6 -- April 12, 2018

- The output of firms is determined simultaneously in _____ competition but sequentially in _____ competition.
 - Cournot; Stackelberg
 - Stackelberg; Cournot
 - collusion; Cournot
 - Cournot; Bertrand with differentiated goods

Use the following to answer question 2.

Figure 10.4



- (Figure 10.4) If the firm can segment the market by residence, it will earn producer surplus of:
 - \$4,025.
 - \$2,680.
 - \$1,800.50.
 - \$2,012.50.
- 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?
 - $q_1 = 210 - q_2$
 - $q_1 = 400 - 0.2P$
 - $q_1 = 19 - 0.5q_2$
 - $q_1 = 400 - 100q_2$

4. An amusement park's customers have the demand curve for park rides given by $Q = 11 - 0.5P$, where P is the price per ride and Q is the number of rides. The marginal cost is \$4. If the amusement park uses a two-part tariff, the park's entrance fee is _____, and its price per ride is _____.
- A) \$40; \$4 B) \$22; \$2 C) \$100; \$11 D) \$81; \$4
5. In Bertrand competition with identical goods, the market outcome is MOST like:
- A) a two-firm cartel. C) a monopoly.
 B) monopolistic competition. D) perfect competition.

Use the following to answer question 6.

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

6. (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 la carte)?
- A) Scenario A B) Scenario C C) Scenario D D) Scenario B

7. Sparkling Water Co. has determined that the price elasticity of demand for a case of its purified water by Michigan residents is -3.0 , while the price elasticity of demand by Florida residents is -2.5 . Assume that the marginal cost is constant at \$8. What price should Sparkling Water Co. charge Michigan and Florida customers?
- A) Customers in Michigan and Florida should be charged \$16 a case.
 - B) Customers in Michigan and Florida should be charged \$13.33 a case.
 - C) Michigan customers should be charged \$12 a case and Florida customers charged \$13.33 a case.
 - D) Michigan customers should be charged \$10 a case and Florida customers charged \$14.00 a case.

Use the following to answer question 8.

Table 11.1

Payoffs: Henry's Monthly Profit, Nancy's Monthly Profit

		Nancy's Nissan	
		Open Sunday	Closed Sunday
Henry's Hyundai	Open Sunday	\$70K, \$70K	\$100K, \$40K
	Closed Sunday	\$40K, \$100K	\$80K, \$80K

8. (Table 11.1) If car dealerships are allowed to be open on Sunday, what is the Nash equilibrium?
- A) Henry earns \$80K and Nancy earns \$80K.
 - B) There is no Nash equilibrium in this market.
 - C) Henry earns \$70K and Nancy earns \$70K.
 - D) Henry earns \$100K and Nancy earns \$100K.
9. A two-firm cartel that produces at a constant marginal cost of \$20 faces a market inverse demand curve of $P = 100 - 0.50Q$. Initially, both firms agree to produce half of the monopoly quantity, each producing 40 units of output. If one of the firms cheats on the agreement (assuming the other firm is compliant and continues to produce at 40 units), how much output should the cheating firm produce to maximize profits?
- A) 60 units
 - B) 44 units
 - C) 80 units
 - D) 41 units

10. A market is characterized with the inverse demand curve $P = 130 - 1.5Q$, and marginal cost of production is constant at \$10. If this market is served by a two-firm cartel that evenly splits the market output, how much output does each firm produce?
- A) 80 units B) 65 units C) 20 units D) 40 units

Answer Key - S18-6

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