

Quiz #6 -- April 14, 2022

You have until the end of class to complete the quiz. Answer the questions on the answer sheet. Pick the alternative that best completes the statement or answers the question. Be sure to write and bubble in your name and PantherID on the answer sheet. You may keep the test booklet.

1. In Bertrand competition with identical goods, the market outcome is MOST like:
A) monopolistic competition. C) a monopoly.
B) a two-firm cartel. D) perfect competition.
2. 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) 41 units C) 80 units D) 44 units
3. The purchase price for Stata version 12 (statistical software used by many economists) is \$895. For users of Stata version 11, the price to upgrade to version 12 is \$395. Which of the following statements is (are) TRUE?
A) Stata is practicing first-degree price discrimination by charging different groups different prices.
B) Stata is using a two-part tariff strategy.
C) The current users of Stata are less price-sensitive than possible future users.
D) Stata is segmenting its market by past purchasing behavior.
4. 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) 40 units D) 20 units

Use the following to answer question 5.

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

5. (Table 11.1) If car dealerships are allowed to be open on Sunday, what is the Nash equilibrium?
- A) Henry earns \$70K and Nancy earns \$70K.
 - B) Henry earns \$100K and Nancy earns \$100K.
 - C) There is no Nash equilibrium in this market.
 - D) Henry earns \$80K and Nancy earns \$80K.

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 B B) Scenario D C) Scenario A D) Scenario C
7. Suppose that two manufacturers produce identical fireproof safes at a constant marginal cost of \$90. The market inverse demand curve for fireproof safes is $P = 450 - 2Q$, where Q is the total output of fireproof safes produced by the two manufacturers, $q_1 + q_2$. The firms compete by simultaneously choosing their quantity to produce. At Nash equilibrium, what is the market price of a fireproof safe?
 A) \$340 B) \$160 C) \$210 D) \$130
8. A firm with market power has the inverse demand curve $P = 90 - 1.5Q$ and marginal cost curve $MC = 10 + Q$. If the firm decides to practice perfect price discrimination, its profit-maximizing output level will:
 A) decrease from 24 to 12 units. C) increase from 14 to 28 units.
 B) increase from 20 to 32 units. D) decrease from 28 to 14 units.
9. 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) \$100; \$11 B) \$40; \$4 C) \$22; \$2 D) \$81; \$4
10. The output of firms is determined simultaneously in _____ competition but sequentially in _____ competition.
 A) Stackelberg; Cournot
 B) Cournot; Bertrand with differentiated goods
 C) collusion; Cournot
 D) Cournot; Stackelberg

Answer Key - S22-6

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