

Name _____ ID# _____

Firm	Total Sales
1	\$50 million
2	\$50 million
3	\$40 million
4	\$30 million
5	\$20 million
6	\$10 million

1. Refer to the table above. Assuming there are only 6 firms in the industry, what is the 4-firm concentration index for this industry?

- A) 17%
- B) 60%
- C) 70%
- D) 85%
- E) None of the above

2. Guaranteed price matching, which occurs when a firm announces that it will automatically match any competitor's price is

- A) good for consumers because it keeps prices low.
- B) bad for consumers because it keeps prices high.
- C) does not affect consumers since it does not actually affect the price of the product.

3. Suppose there 5 firms in an industry. Each firm accounts for 20% of total industry sales. What is the Herfindahl-Hirschman Index (HHI) for this industry?

- A) 20
- B) 200
- C) 1000
- D) 2000
- E) None of the above

4. Refer to the question above. If two of the firms were to merge, would this merger be challenged by the FTC?

- A) Yes
- B) No

5. Which key assumption do we change when going from the analysis of a perfectly competitive industry to a monopolistically competitive industry?

- A) In perfect competition, firms produce identical products whereas in monopolistic competition firms produce slightly differentiated products.
- B) In perfect competition, firms can enter the market in the long run whereas in monopolistic competition firms cannot enter the market in the long run.
- C) In perfect competition, there are many firms whereas in monopolistic competition there are only a few firms.
- D) In perfect competition, consumers have perfect knowledge of the prices which the firms charge for their product whereas in monopolistic competition consumers do not have perfect knowledge of the prices which the firms charge for their product.

6. In a monopolistically competitive industry, in the long run we expect that

- A) firms will make positive economic profits
- B) firms will produce at the minimum of average total cost
- C) firms will make zero economic profit
- D) firms will produce at greater than the minimum of average total cost
- E) More than one answer is correct.

7. Which government agencies are responsible for enforcing antitrust laws?

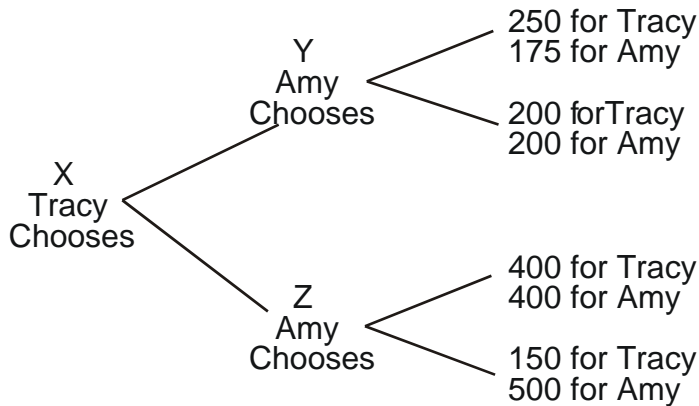
- A) The Federal Reserve and the Attorney General
- B) The Antitrust Division of the Department of Justice and the Attorney General
- C) The Federal Trade Commission and the Antitrust Division of the Department of Justice
- D) The Federal Trade Commission and the Attorney General

8. Suppose a monopolist faces the following demand curve:

Price	Quantity
\$60	0
\$55	1
\$50	2
\$45	3
\$40	4
\$35	5
\$30	6
\$25	7

What is the marginal revenue of the 4th unit of output?

- A) \$5 D) \$35
- B) \$15 E) None of the above
- C) \$25



9. Refer to the game tree above. If both players are trying to maximize their own payoffs, the likely outcome of this game is that

- A) Tracy gets 250 and Amy gets 175
- B) Tracy gets 200 and Amy gets 200
- C) Tracy gets 400 and Amy gets 400
- D) Tracy gets 150 and Amy gets 500

10. Consumer surplus is best defined as

- A) the amount a person is willing to pay for a good.
- B) the difference between what a person is willing to pay for a good and what a person actually has to pay for the good.
- C) The amount of total utility a person receives from consuming a good.
- D) the difference between the price of a good and what it costs the manufacturer to produce it.

11. According to the kinked demand curve model, if a firm in an oligopoly raises its prices, competing firms will _____ their prices, and if a firm in an oligopoly lowers its prices, competing firms will _____ their prices.

- A) lower; lower
- B) lower; raise
- C) not change; lower
- D) raise; raise
- E) not change; raise

12. A tit-for tat strategy means that

- A) you should choose the strategy that your opponent chooses in the current period.
- B) you should choose the strategy that your opponent chose in the previous period.
- C) you should choose the strategy that you think your opponent will choose in the next period.
- D) you should choose your dominant strategy.

13. Which of the following is not a necessary condition for a firm to be able to engage in price discrimination?

- A) The firm must face a perfectly elastic demand curve
- B) Consumers must not be able to easily resell the good
- C) The firm must be able to identify different groups of consumers who have different demands for the good.

14. Other things being equal, the _____ the demand curve, the greater the proportion of a tax that is paid by consumers, and the _____ the supply curve, the greater the proportion of a tax that is paid by consumers.

- A) steeper; steeper
- B) steeper; flatter
- C) flatter; steeper
- D) flatter; flatter

15. Suppose the demand for a product is given by $P = 25 - 2Q$. Also the Supply is given by $P = 5 + 3Q$. If a \$5 per-unit excise tax is placed on the consumers, what price will buyers pay after the tax?

- A) 9
- B) 14
- C) 17
- D) 19
- E) 22

16. Relative to a competitively organized industry, a monopoly

- A) produces more output and charges a higher price.
- B) produces less output and charges a higher price.
- C) produces more output and charges a lower price.
- D) produces less output and charges a lower price.

Part 2—Short answer. Please give concise accurate answers to each of the following questions.

1. Suppose that two players are playing the following game. Player A can choose either Top or Bottom, and Player B can choose either Left or Right. The payoffs are given in the following table:

		Player B			
		Left		Right	
Player A	Top	100	80	200	100
	Bottom	10	50	150	40

where the number on the left is the payoff to Player A, and the number on the right is the payoff to Player B.

A) (4 points) Does player A have a dominant strategy, and if so what is it?

B) (4 points) Does player B have a dominant strategy and if so what is it?

C) (1 point each) For each of the following say True if the strategy combination is a Nash equilibrium, and False if it is not a Nash equilibrium:

i) Player A plays Top and Player B plays Left

ii) Player A plays Bottom and Player B plays Left

iii) Player A plays Top and Player B plays Right

iv) Player A plays Bottom and Player B plays Right

D) (4 points) If each player plays her maximin strategy what will be the outcome of the game? (Give your answer in terms of the strategies each player chooses—for example, “Player A plays Bottom and Player B plays Right”)

2. A monopolist faces a demand curve given by:

$P = 200 - 10Q$, where P is the price of the good and Q is the quantity demanded. The marginal cost of production is constant and is equal to \$60. There are no fixed costs of production.

A) (4 points) What quantity should the monopolist produce in order to maximize profit?

B) (4 points) What price should the monopolist charge in order to maximize profit?

C) (4 points) How much profit will the monopolist make?

D) (4 points) What is the deadweight loss created by this monopoly (hint: compare the monopoly outcome with the perfectly competitive outcome).

E) (4 points) If the market were perfectly competitive, what would the price of the product be?

Exam 3 Answer Key (Form A)

Multiple Choice

1.D 2.B 3.D 4.A 5.A 6.E 7.C 8.C 9.B 10.B 11.C 12.B 13.A 14.B 15.D 16.B

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where the number on the left is the payoff to Player A, and the number on the right is the payoff to Player B.

A) (4 points) Does player A have a dominant strategy, and if so what is it?

Yes--Top

B) (4 points) Does player B have a dominant strategy and if so what is it?

No

C) (1 point each) For each of the following say True if the strategy combination is a Nash equilibrium, and False if it is not a Nash equilibrium:

i) Player A plays Top and Player B plays Left

False

ii) Player A plays Bottom and Player B plays Left

False

iii) Player A plays Top and Player B plays Right

True

iv) Player A plays Bottom and Player B plays Right

False

D) (4 points) If each player plays her maximin strategy what will be the outcome of the game? (Give your answer in terms of the strategies each player chooses—for example, “Player A plays Bottom and Player B plays Right”)

Top/Left

2. A monopolist faces a demand curve given by:

$P = 200 - 10Q$, where P is the price of the good and Q is the quantity demanded. The marginal cost of production is constant and is equal to \$60. There are no fixed costs of production.

A) (4 points) What quantity should the monopolist produce in order to maximize profit?

$$Q^M = 7$$

B) (4 points) What price should the monopolist charge in order to maximize profit?

$$P^M = 130$$

C) (4 points) How much profit will the monopolist make?

$$\$490$$

D) (4 points) What is the deadweight loss created by this monopoly (hint: compare the monopoly outcome with the perfectly competitive outcome).

$$\$245$$

E) (4 points) If the market were perfectly competitive, what would the price of the product be?

$$\$60$$