ECON 180 - Regulation & Antitrust Policy
Drake University, Spring 2013
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Signature: ______________________

Printed name: ______________________

QUIZ 7 VERSION A
"Horizontal Mergers"

INSTRUCTIONS: This exam is closed-book, closed-notes. Simple calculators are permitted, but graphing calculators or calculators with alphabetical keyboards are NOT permitted. Mobile phones or other wireless devices are NOT permitted. Points will be subtracted for illegible writing or incorrect rounding. Point values for each question are noted in brackets.

I. Multiple choice: Circle the one best answer to each question. [2 pts each: 8 pts total]

(1) Suppose a bicycle manufacturer merged with another bicycle manufacturer. This would be an example of a
a. horizontal merger.
b. vertical merger.
c. conglomerate merger for product extension.
d. conglomerate merger for market extension.
e. pure conglomerate merger.

(2) Suppose a gasoline distributor in the Midwest merged with a gasoline distributor in the South. This would be an example of a
a. horizontal merger.
b. vertical merger.
c. conglomerate merger for product extension.
d. conglomerate merger for market extension.
e. pure conglomerate merger.

(3) In the 1997 proposed merger of Staples and Office Depot, the government argued that
a. only the effect of the merger on market price should be considered.
b. only cost savings should be considered.
c. the merger was acceptable.
d. the effect of the merger on cost savings and market price should be weighed using the compensation test.

(4) According to the DOJ-FTC *Non-Horizontal Merger Guidelines*, a conglomerate merger for market extension or product extension may be challenged if the acquired firm's market is highly concentrated and the merger
a. increases concentration further.
b. eliminates potential competition.
c. raises the probability of collusion across firms.
d. raises costs of the acquired firm.
e. any of the above.

II. Problems: Insert your answer to each question below in the box provided. Use the margins and graphs for scratch work—only the answers in the boxes will be graded. Work carefully—partial credit is not normally given for questions in this section.

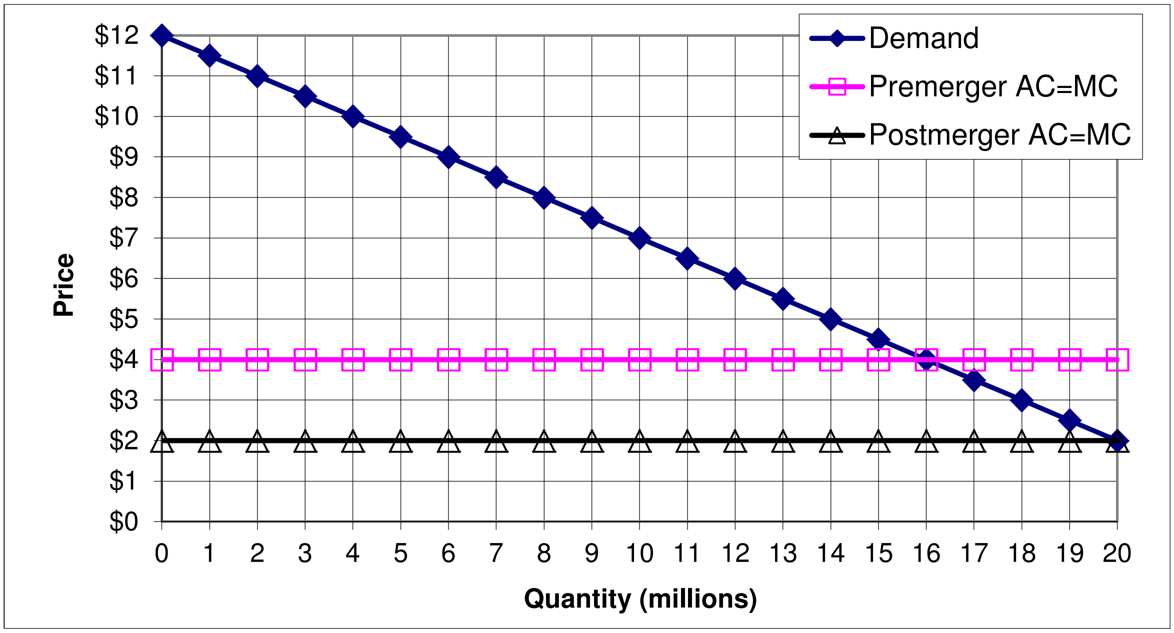
(1) [Merger statutes: 15 pts] Consider the following six statutes (laws):

- *Celler-Kefauver Act*
- *Clayton Act, Section 7*
- *Federal Trade Commission Act*
- *Hart-Scott-Rodino Act*
- *Sherman Act, Section 1*
- *Sherman Act, Section 2.*

For each description or quote below, write the appropriate statute.

a. Requires prior notification of mergers to the Federal Trade Commission and the Antitrust Division of the Department of Justice.	
b. "Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal."	
c. "Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony…"	
d. Prohibits merger by acquiring the *stock* of a rival corporation, where the effect is to lessen competition.	
e. Prohibits merger by acquiring the *assets* of a rival corporation, where the effect is to lessen competition.	

(2) [Welfare tradeoffs of mergers: 36 pts] Consider the industry depicted in the graph below.



Assume this industry is currently competitive and that all firms have the same average cost (AC) and marginal cost (MC) shown above as the "premerger" value.

a. What is the competitive equilibrium price?	$
b. What is the competitive equilibrium quantity?	million

Suppose a proposed merger would have two effects. First, it would change the industry to a monopoly. Second, it would reduce AC and MC to the "postmerger" value shown above—perhaps due to economies of scale and rationalization of production.

c. *Using a straightedge*, draw the marginal revenue curve of the monopoly and label it.

d. What price would the monopoly charge?	$
e. What quantity would the monopoly produce?	million
f. Compute the monopoly's Lerner index (or price-cost margin).	
g. Compute the loss of consumer surplus as the price rises from the premerger competitive value to the postmerger monopoly value.	$ million
h. How much of this loss is a transfer to the monopoly producer?	$ million
i. Compute the deadweight loss as a result of monopoly pricing (without considering cost savings).	$ million
j. Compute the cost savings in producing the monopoly level of output as a result of the merger.	$ million
k. Does net social welfare *increase or decrease* as a result of the merger?	
l. By how much?	$ million

(3) [HHI and merger guidelines: 18 pts] Shares in U.S. beer market in 2012 were as follows.[1]

Anheuser-Busch InBev	39%
MillerCoors	26%
Grupo Modelo (maker of Corona)	7%
Heineken USA	6%
Others	22%

a. Compute the value of the Hirschman-Herfindahl index. Assume that "Others" are too small to affect the HHI.

b. Under the 2010 DOJ-FTC *Horizontal Merger Guidelines*, would this industry be classified as "unconcentrated," "moderately concentrated," or "highly concentrated"?

In 2012 Anheuser-Busch InBev proposed to buy Grupo Modelo.

c. Compute the postmerger value of the Hirschman-Herfindahl index.

d. Under the DOJ-FTC *Horizontal Merger Guidelines*, would this industry now be classified as "unconcentrated," "moderately concentrated," or "highly concentrated"?

e. On the basis of these HHI calculations alone, would the government conclude that this merger
(i) is "presumed to be likely to enhance market power," or
(ii) "raises significant competitive concerns," or
(iii) is "unlikely to have adverse competitive effects," according to the 2010 *Guidelines?*

f. Why or why not?

[1] *Wall Street Journal*, February 2, 2013, pp. A1-A2, B1.

(4) [Conglomerate mergers: 18 pts] Suppose Acme Electronics produces computers and smart phones. Its total cost depends on output levels according to the following table.

Total cost	Zero computers	100 computers	200 computers
Zero smart phones	\$0	\$50,000	\$90,000
50 smart phones	\$20,000	\$75,000	\$120,000
100 smart phones	\$42,000	\$100,000	\$140,000

a. Suppose Acme produces only computers. Does it enjoy *economies of scale* in producing computers? (Answer YES or NO.)

b. Why or why not?

c. Suppose Acme produces only smart phones. Does it enjoy *economies of scale* in producing smart phones? (Answer YES or NO.)

d. Why or why not?

e. Suppose Acme produces both computers and smart phones. Does it enjoy *economies of scope*? (Answer YES or NO.)

f. Why or why not?

III. Critical thinking [5 pts]

Consider the market for pizzas in Des Moines. Suppose a rise in the price of pizzas in Des Moines would cause people to switch to hamburgers in Des Moines, but would not induce people to drive to West Des Moines for pizza. Consider the following sellers in this market.

Adam's Pizza *Des Moines*	*Betty's Hamburgers* *Des Moines*	*Colin's Pizza* *West Des Moines*	*Doug's Hamburgers* *West Des Moines*
Emily's Hamburgers *Des Moines*	*Fred's Pizza* *Des Moines*	*Geoff's Pizza* *Des Moines*	*Harriet's Hot Dogs* *West Des Moines*

a. Draw a circle enclosing the market definition that would be used by the FTC and the Antitrust Division for the purpose of analyzing possible horizontal mergers.

b. Explain your reasoning.

[end of quiz]