Quiz #5, March 25, 2021

1. Suppose a firm's inverse demand curve is given by $P = 200 - 3Q$. Which of the following statements is (are) TRUE?

   I.   The firm's marginal revenue curve is given by $MR = 200 - 1.5Q$.
   II.   The firm's marginal revenue can be negative.
   III. The firm's marginal revenue curve is given by $MR = 200 - 6Q$.
   IV.   When $Q = 12$, $MR = \$164$.

   A) I and II
   B) III and IV
   C) II and III
   D) I and IV

Use the following to answer question 2.

Figure 9.7
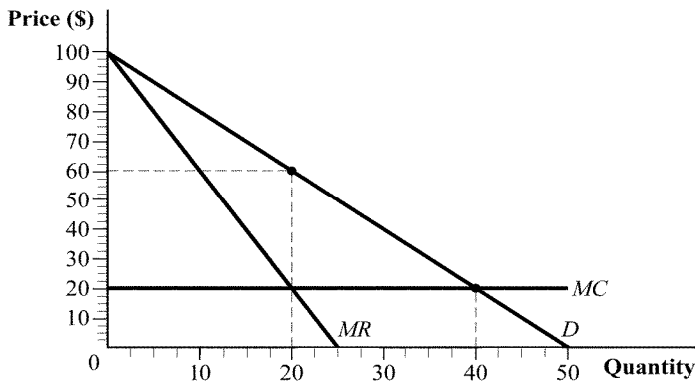
2. (Figure 9.7) The levels of producer's and consumer's surplus under monopoly are _____ and _____, respectively.
   A) $1,200; $400
   B) $800; $400
   C) $800; $800
   D) $400; $800

3. Mobile phone portability allows consumers to retain their phone number if they change to a different phone network, which will tend to:
   A) increase barriers to entry in the phone industry.
   B) discourage product differentiation and increase switching costs.
   C) encourage the formation of natural monopolies.
   D) reduce market power in the phone industry.

4. Bubba Golf, a manufacturer of golf clubs, can sell 4 drivers at $1,000 each. To sell 5 drivers, Bubba Golf must lower the price to $850 each. The marginal revenue of the fifth club is:
   A) $150.
   B) $250.
   C) $925.
   D) $850.

5. A firm with market power has an inverse demand curve of $P = 900 - 5Q$ and marginal cost of $MC = 40Q$, where Q is measured in thousands. What is the deadweight loss from market power at the firm's profit-maximizing output level?
   A) $810,000
   B) $9,000,000
   C) $90,000
   D) $1,620,000

6. Which of the following characteristics relate(s) to perfect competition?

   I.   An industry consists of many small firms.
   II.   Consumers consider each firm's product to be different from other firm's products.
   III. New firms can easily enter the industry.

   A) I and II
   B) I and III
   C) II and III
   D) III

Use the following to answer question 7.

Figure 8.3
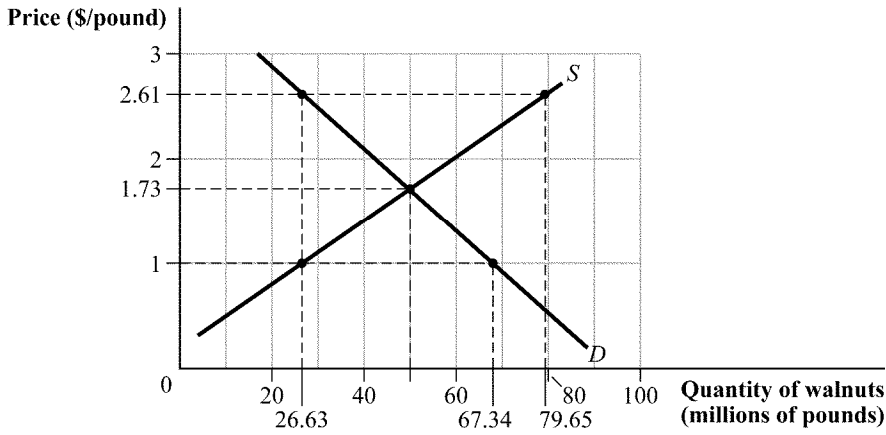
7. (Figure 8.3) The graph depicts the perfectly competitive market for walnuts. Which of the following statements is (are) TRUE?

I.   The demand curve facing a walnut grower is perfectly elastic at $1.

II.   If a walnut grower sold 80,000 pounds of walnuts, his total revenue would be $138,400.

III. If a walnut grower sold one more pound of walnuts, his total revenue would increase by $1.73.

A) I, II, and III
B) II
C) II and III
D) I

Use the following to answer question 8.

Figure 8.5
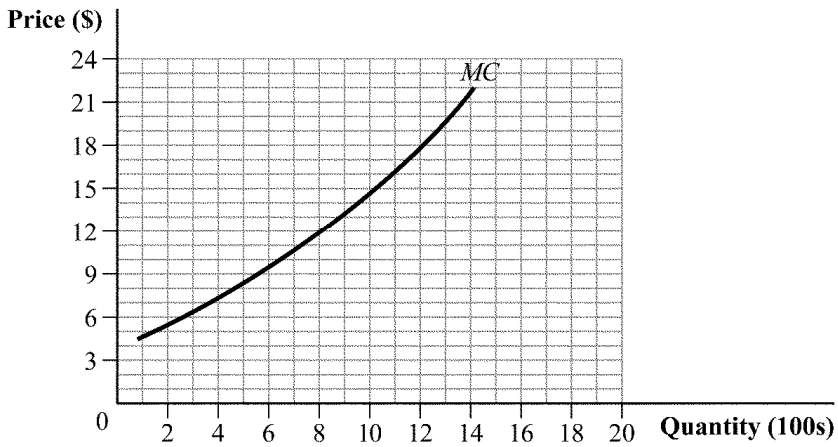
8. (Figure 8.5) The graph shows a firm's marginal cost curve. This firm operates in a perfectly competitive industry with market demand and supply curves given by $Q^d = 100 - 8P$ and $Q^S = -20 + 2P$, where Q is measured in millions of units. Based on the figure, how many units of output will the firm produce at the equilibrium price?
   A) 1,100
   B) 800
   C) 1,200
   D) 400

9. Suppose that a firm is earning a 12% return on capital in a perfectly competitive industry, and the market return outside the industry is 9.5%. Which of the following statements is (are) TRUE?
   A) In the short run, the firm is making a below-market return of 2.5%.
   B) In the short run, the firm is making a negative return on capital of 2.5%.
   C) In the long run, the firm's return on capital will be 0%.
   D) In the long run, the firm's return on capital will be 9.5%.

10. In a perfectly competitive industry, the equilibrium price is $56 and the minimum average total cost of the industry's firms is $40. If this is a constant-cost industry, we can expect that in the long run, firms will _____ the market, shifting the industry's short-run supply curve _____.
    A) enter; outward until the minimum average total cost rises to $56.
    B) enter; outward until the new equilibrium price is $40.
    C) enter; inward until firms are making positive profit.
    D) exit; inward until firms are breaking even.

Answer Key - S21-5

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