

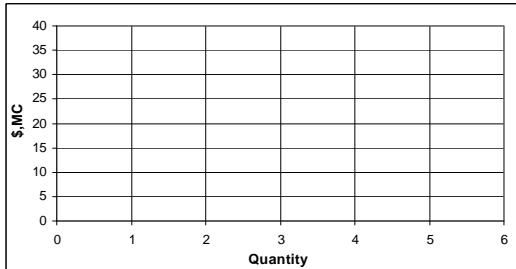
**Part A**

(1) What is the definition of marginal cost? [39]<sup>1</sup>

(2) In competitive markets, sellers produce another unit whenever \_\_\_\_\_ is greater than or equal to \_\_\_\_\_ . [41]

(3) Below is a table showing the marginal cost for various quantities. Graph the relationship between marginal cost and quantity. Assume discrete units. [41]

Quantity	Marginal Cost
1	\$5
2	\$8
3	\$11
4	\$16
5	\$25
6	\$38



(4) If the price is \$20, how many units will the seller produce? [41]

(5) If the price is \$30, how many units will the seller produce? [41]

<sup>1</sup> Numbers in [.] brackets denote the page number in the textbook related to the question.

(6) If the price is \$30, given your answer to #5, what is producer surplus? [42]

(7) Suppose the good of interest is a crop, like corn or wheat. In one or more complete sentences, describe why the marginal cost is rising in the quantity produced. [39-40]

(8) Total profits equal producer surplus minus \_\_\_\_\_ . [42]

(9) \_\_\_\_\_ costs are defined as costs that change as production is varied, where \_\_\_\_\_ costs are defined as costs that remain the same regardless of how much is produced. [42]

- (a) marginal, variable
- (b) fixed, variable
- (c) fixed, marginal
- (d) marginal, fixed
- (e) variable, fixed

(10) If producer surplus is \$100 and profits are \$80, what are fixed costs? [42]

(11) A farmer makes \$10 per acre in accounting profits from raising corn. She could have made \$5 per acre raising hops or \$3 per acre raising wheat. What is the opportunity cost of raising corn? [38]

(12) As fixed costs rise, the optimal quantity to produce and sell will

- (a) rise
- (b) fall
- (c) neither rise nor fall

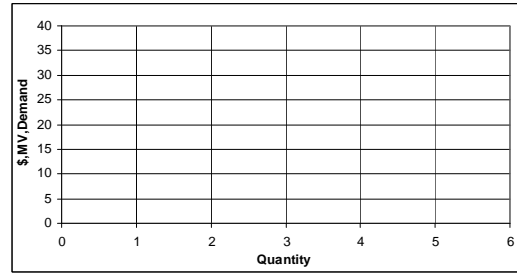
(13) The height of a demand curve tell us the marginal value. What is the definition of marginal value? [44-45]

(14) In competitive markets, buyers purchase another unit whenever

\_\_\_\_\_ is  
 greater than or equal to  
 \_\_\_\_\_ . [46]

(15) Below is a table showing the marginal value / demand for various quantities. Graph the relationship between marginal value and quantity. Assume discrete units. [46]

Quantity	Marginal Value / Demand
1	\$35
2	\$30
3	\$25
4	\$20
5	\$15
6	\$10



(16) If the price is \$22, how many units will the buyer purchase? [46]

(17) If the price is \$29, how many units will the buyer purchase? [46]

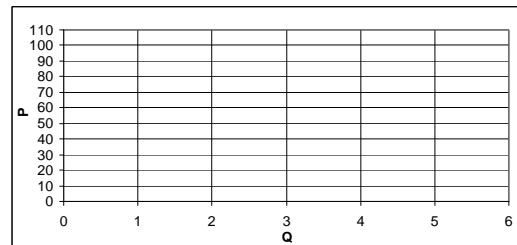
(18) If the price is \$29, given your answer to #17, what is consumer surplus? [46-47]

(19) If the buyer is purchasing the good to consume herself, as opposed to a firm purchasing an input, what does consumer surplus measure? [46-47]

**Part B**

(1) The marginal cost curve is also the \_\_\_\_\_ curve. [38-42]

(2) Suppose the supply curve formula is:  $P = 20 + 5(Q)$ . Graph the supply curve below. [38-42]



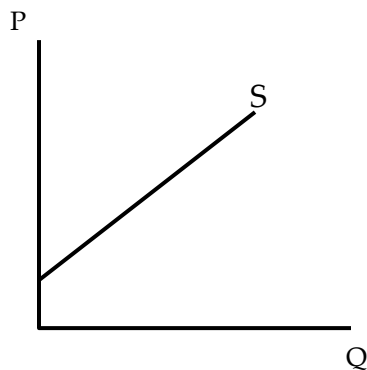
(3) If price equals \$32.5, how many units will be produced? [38-42]

(4) If price is \$32.5, what is producer surplus? [38-42]

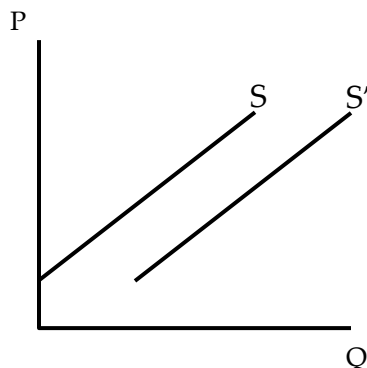
(5) The three factors that shift the supply curve are [42-44]

- 1.
- 2.
- 3.

(6) Below is a supply curve. Suppose that due to an increase in input prices (e.g. higher fertilizer prices) the marginal cost of grain production rises. Illustrate how the supply curve will shift. [42-44]



(7) Consider the supply for beef. Below is a supply curve shifting rightward, denoting an increase in supply. Circle all situations that would cause such a shift. [42-44]



- (a) increase in input prices (e.g. cattle feed)
- (b) decrease in input prices (e.g. cattle feed)
- (c) technology that increases cost of production
- (d) technology that lowers the cost of production

(8) The Three I's of Economic Theory are...

- 1.
- 2.
- 3.

(9) Quixotic crusaders are always complaining about the low wages Wal-Mart cashiers receive. We decide to make up for Wal-Mart's [supposedly] selfishness by placing a tip jar at the Wal-Mart checkout counter. Many consumers regularly provide tips, summing to about \$5,000 per cashier per year. Using the Three I's of Economic Theory, explain why these tips will not benefit Wal-Mart cashiers. [5-12]

(10) Grocery stores regularly sell “free trade” coffee. If you purchase this coffee, the company promises to pay the coffee farmers a premium over the market price. The idea is to benefit coffee farmers in developing countries, who typically experience very low incomes. Many would be considered living in poverty. Assume that coffee farmers have the ability to increase production in response to higher prices, and would do so. Using the Three I’s of Economic Theory, explain that while free trade coffee is full of good intentions, the program may be unsustainable in the long-run and may never deliver any real benefits to coffee farmers. [5-12]

(11) On pages 9-11 of the textbook, there is a story about a farmer named Wren. In this story, we find that the government subsidizes intended to boost Wren’s income only provides benefit for the landowner. In this question, let us change the story. Suppose that land is not fixed. There is plenty of good land available, and if Wren wants to farm more land she can easily procure additional acres at the same rental rate she currently pays. Given this alternative assumption, tell a new, revised story of how the government subsidies will not benefit Wren (Hint: for the Indifference Principle to hold after the per-acre subsidy, the price of something else must change to counter the increase in income from the subsidy, leaving her making the same amount of money as before). [5-12]