Additional Items, ECO 3033 Quiz 1

Multiple Choice
Identify the letter of the choice that best completes the statement or answers the question.

_B_ 1. A demand curve shows how quantity demanded changes with price. This implies that
   a. only price shifts a demand curve
   b. everything else that affects demand is held constant
   c. quantity demanded is unrelated to price
   d. economists are concerned only with money
   e. it is impossible to show how anything but price affects demand

_C_ 2. Movements along a demand curve are called changes in
   a. demand
   b. opportunity costs
   c. quantity demanded
   d. the substitution effect
   e. preferences

_E_ 3. Studies show that the demand curve for peas has shifted. Which of the following explanations would you reject first?
   a. The price of string beans has changed.
   b. The demand for corn has changed.
   c. The demand for string beans has changed.
   d. The income of consumers has changed.
   e. The price of peas has changed.

_C_ 4. The relationship between price and the quantity supplied can be explained by which of the following?
   a. In expanding output, firms will incur greater total costs.
   b. As the price of a commodity falls, producers will find it more profitable to use higher-priced inputs in their production process.
   c. In the face of rising production costs, firms can increase profits by expanding output only if the price of output increases.
   d. To expand output, firms must hire more resources, which are always of poorer quality.
   e. Consumers want more at lower prices.

_D_ 5. The short run is a period of time
   a. equal to or less than six months
   b. during which all resources may be varied
   c. during which all resources are fixed
   d. during which at least one resource is fixed
   e. during which at least one resource may be varied

_E_ 6. The marginal product of labor is the
   a. cost of one worker
   b. average output per worker
   c. change in revenue from selling one more unit of output
   d. change in revenue from using one more unit of labor
   e. change in output from using one more unit of labor

(Go to next page for some problem samples.)
Problem X.

Determine the equations for the supply curve in quadrant (a) and the demand curve in quadrant (b).

Problem Y.

Suppose in a given market the demand curve is:

\[ Q = 2000 - 10P, \]

While the supply curve is:

\[ Q = 200 + 5P. \]

1. What is the $S$ axis intercept of the demand curve?
2. If price is at $150, what will occur in this market?
3. What are the equilibrium price and quantity for this market?

Answers:

Problem X: Supply curve is \( P = 50 + 0.2Q \) or \( Q = -250 + 5P \)

Demand curve is \( Q = 600 - 5P \) or \( P = 120 - 0.2Q. \)

Problem Y: 1. Intercept is 200.
2. Quantity supplied exceeds quantity demanded, or \( 950 > 500, \) so there is a surplus.
3. Equilibrium occurs where \( 2000 - 10P = 200 + 5P; \) \( 15P = 1800, \) so \( P = 120. \) Quantity demanded = Quantity supplied = 800.