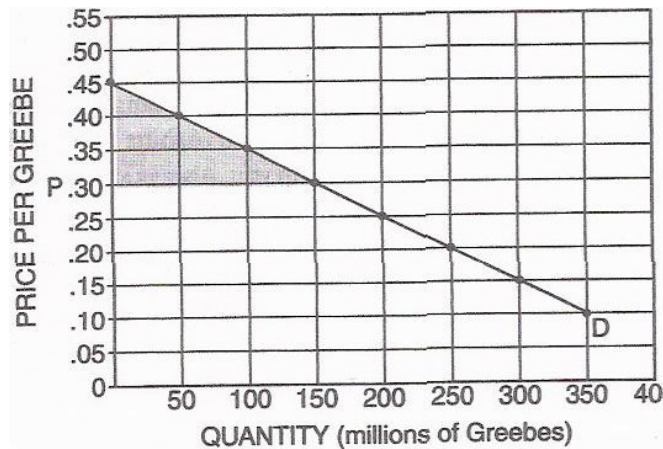


Supply and Demand Revisited

Consumer Surplus

Once we have a demand curve or a marginal benefit curve, we can define the concept of consumer surplus. Consumer surplus is the value received from the purchase of a good in excess of the price paid for it, or stated differently, the different between the amount a person is willing and able to pay and the actual price of the unit.

An approximation of consumer surplus can be shown graphically as the area below the demand curve above the price paid. See example of the demand curve below.



If the price for all quantities sold is established at \$.30, the area shaded between the demand curve and \$.30 is the area of consumer surplus

There are buyers who will benefit because they are willing and able to pay higher prices than the established market price (\$.30). For example, 50 million Greebes are demanded at \$.40, but since the market price is \$.30, there is a gain to the buyers.

Questions

1. Approximately what will be the consumer surplus shown in the demand curve above? (Hint: Area of the triangle)

2. If the price consumers pay increases, the shaded area (increases or decreases). If the price consumers pay decreases, the shaded area (increases or decreases).

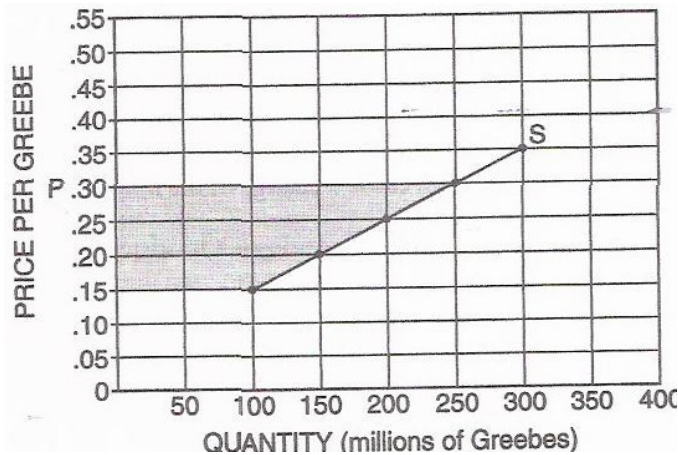
3. If the equilibrium price drops to \$.20, what will happen to consumer surplus?

4. At \$.20, calculate the consumer surplus for buyers willingness to pay
 - a. \$.40 _____
 - b. \$.35 _____
 - c. \$.30 _____
 - d. \$.25 _____
 - e. Total Surplus _____

5. Will there be any consumer surplus at a price of \$.20 for the buyers willing and able to spend \$.20, \$.15, or \$.10? Why are why not?

Producer Surplus

Once we have a supply curve or marginal cost curve, we can define the concept of producer surplus. Producer surplus is the amount a seller is paid minus the seller's cost. An approximation of producer surplus can be shown graphically as the area below the equilibrium price and above the supply/marginal cost curve. This is shown on the supply curve below.



1. Circle the correct answer in parentheses for these questions.
 - a. If the equilibrium price increases, the shaded area (increases or decreases)
 - b. If the equilibrium price decreases, the shaded area (increases or decreases)

2. Based on the graph above, assume that the selling price is established at \$.25. There are producers who will benefit because some are willing to offer Greebes for a price lower than the established market price. For example, 100 million Greebes are supplied at \$.15, but since the market price is \$.25, there is producer surplus.
 - a. Approximately what will be the total producer surplus for the sellers if the price is \$.25?

 - b. If a seller's price were to increase to \$.30, what will happen to producer surplus?

 - c. Calculate the producer surplus for sellers willing to offer at a price of \$.30
 - i. \$.15 _____
 - ii. \$.20 _____
 - iii. \$.25 _____
 - iv. \$.30 _____
 - v. Total Surplus _____