CH-310-A Microeconomics - Theory and Policy

Chapter 3 and 4 of Krugman and Wells

Tutorial I, September 29, 2021

The market for soft drinks

The U.S. Department of Agriculture reported that in 1997 each person in the United States consumed an average of 41 gallons of soft drinks (nondiet) at an average price of $2 per gallon. Assume that, at a price of $1.50 per gallon, each individual consumer would demand 50 gallons of soft drinks. The U.S. population in 1997 was 267 million. From this information about the individual demand schedule, calculate the market demand schedule for soft drinks for the prices of $1.50 and $2 per gallon.

Demand curve

Which of the following factors cause a movement along the demand curve?

(a) change in the prices of related goods

(b) change in the price of the good

(c) change in the population

(d) both a change in the price of the good and a change in the population

Substitutes

If goods A and B are substitutes, a decrease in the price of good B will

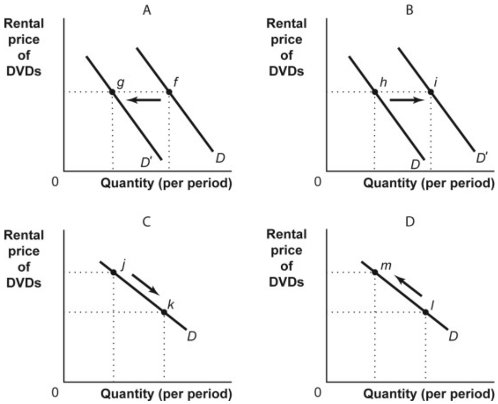
(a) increase the demand for good A.

(b) increase the demand for good B.

(c) decrease the demand for good A.

(d) increase the demand for good B and decrease the demand for good A.

Complements



A decrease in the price of DVD players (a complement) would result in a change illustrated by: (a) the move from f to g in panel A; (b) the move from h to i in panel B; (c) the move from j to k in panel C; (d) the move from l to m in panel D.

Demand and supply shifts

Consider the market for corn. What happens if there is an increased demand for corn tortillas and, at the same time, a new corn seed becomes available that increased the per-acre yield dramatically?

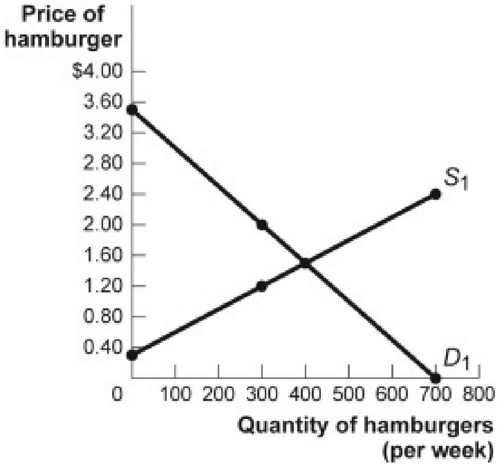
(a) Price and quantity decrease.

(b) The change in price is indeterminate, quantity decreases.

(c) The change in price is indeterminate, quantity increases.

(d) Price increases, the change in quantity is indeterminate.

Producer surplus



The figure shows the weekly market for hamburgers at the Tasty Burger Palace. If the Palace sells 400 hamburgers, producer surplus will equal:

Total surplus

If total surplus falls, which of the following must have occurred?

(a) There was an increase in demand or a decrease in supply.
(b) There was an increase in demand and an increase in supply.
(c) There was a decrease in demand or a decrease in supply.
(d) There was a decrease in demand and an increase in supply.

The market for cucumbers

Assume that the demand for cucumbers is a function of their price, P, and consumer income, I, while the supply of cucumbers is a function of their price and the number of rainy days in the summer, R. The demand and supply curves for cucumbers are given by:
Demand: $Q_D = 100,000 - 50P + 2I$
Supply: $Q_S = -10,000 + 20P - 2000R$

(a) If I = 20,000 and R = 10, what is the equilibrium price and quantity?

(b) How does the answer change if rain increases to 15? What is the new equilibrium price and quantity?

Consumer surplus

Leon goes to the clothing store to buy a new T-shirt, for which he is willing to pay up to \$10. He picks out one he likes with a price tag of exactly \$10. When he is paying for it, he learns that the T-shirt has been discounted by 50%. What is his consumer surplus?

Consumer surplus

Alberto goes to the CD store hoping to find a used copy of Nirvana's Greatest Hits. He is willing to pay up to $10 for the copy. The store has one copy selling for $10, which he purchases. What is his consumer surplus?

Consumer surplus

After soccer practice, Stacey is willing to pay \$2 for a bottle of mineral water. The 7-Eleven sells mineral water for \$2.25 per bottle, so she declines to purchase it. How much consumer surplus is genrated?

Individual and market demand curve

Consider a market with two people, Maria and Stephan, who both eat apples. Maria's demand curve for apples is:

$$Q_m = 15 - 5P$$

Stephan's demand curve for apples is:

$$Q_s = 20 - 2P$$

What is the market demand curve for apples? Graph the two individual demand curves and the market demand curve.