

Assignment 3

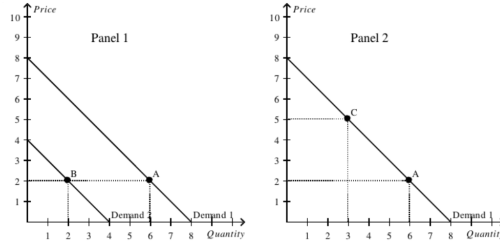
Supply and Demand

1. In the market for chocolates, the following table depicts the demand for ice-cream by Peter, Tony and Steve at the given prices.

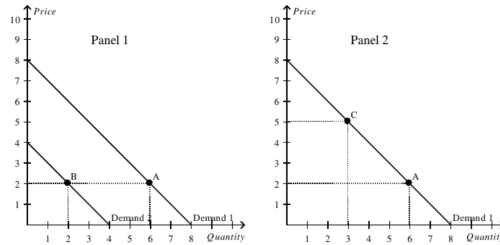
Price	Quantity		
	Peter	Tony	Steve
\$12	5	4	11
\$10	6	6	13
\$8	7	8	15
\$6	8	10	17
\$4	9	12	19
\$2	10	14	21

- (a) If the market consists of Peter, Tony, and Steve and the price falls from \$6 to \$4, the quantity demanded in the market increases by?
- (b) If the market consists of Peter and Tony only and the price falls from \$6 to \$4, the quantity demanded in the market increases by?
- (c) If the market consists of Peter and Steve only and the price falls from \$6 to \$4, the quantity demanded in the market increases by ?
- (d) If the market consists of Tony and Steve only and the price falls from \$6 to \$4, the quantity demanded in the market increases by ?

2. Suppose that the federal government is concerned about obesity in the United States. Congress is considering a plan which would require “junk food” producers to include warning labels on all junk food. If the warning labels are successful, we could illustrate the plan as producing a movement from



- (a) Point A to Point B in Panel 1.
 (b) Point B to Point A in Panel 1.
 (c) Point A to Point C in Panel 2.
 (d) Point C to Point A in Panel 2.
3. The federal government now considers an alternate plan, imposing a tax on all products considered to be junk food, thereby increasing the price of all junk food. We could illustrate the tax as producing a movement from



- (a) Point A to Point B in Panel 1.
 (b) Point B to Point A in Panel 1.
 (c) Point A to Point C in Panel 2.
 (d) Point C to Point A in Panel 2.

4. How will the following affect the demand curve for chocolate in Belgium. Explain.
 - (a) An increase in the price of ice-cream, a substitute for chocolate
 - (b) An increase in the price of chips, a complement to chocolate
 - (c) Belgium starts exporting chocolate to other countries
 - (d) A decrease in the price of chocolate
5. How would the following affect the supply curve for chocolate in Belgium. Explain.
 - (a) An increase in the price of chocolate
 - (b) An increase in the price of chips, a complement to chocolate
 - (c) A decrease in the price of sugar, an input to chocolate
 - (d) Several grocery stores shut down
6. Using supply-and-demand diagrams, show the effects of the following events on the market for sweatshirts
 - (a) A hurricane in South Carolina damages the cotton crop.
 - (b) The price of leather jackets falls.
 - (c) All schools require sweatshirts as part of their winter uniform
 - (d) New knitting machines that make sweatshirts more efficiently are invented.

Elasticity and Its Application

1. The owner of a local hot dog stand has estimated that if he lowers the price of hot dogs from \$2.00 to \$1.50, the quantity demanded will increase from 400 to 500 hot dogs per day. Calculate the price elasticity of demand. Is the demand elastic or inelastic?
2. When the price of fresh fish increases 10%, quantity demanded decreases 5%. The price elasticity of demand for fresh fish is _____ and total revenue from fresh fish sales will _____.
 - (a) elastic; decrease
 - (b) elastic; increase
 - (c) inelastic; decrease
 - (d) inelastic, increase
3. When the price of fresh fish increases 10%, quantity demanded is unchanged. The price elasticity of demand for fresh fish is _____.
 - (a) perfectly inelastic.
 - (b) elastic.
 - (c) inelastic.
 - (d) unitary elastic.
4. The price of a good rises from \$20 to \$28 and the quantity supplied rises from 80 to 120 units. Calculate the price elasticity of supply.