

Demand and Supply: Market Equilibrium

In this chapter, we study the demand and supply of a perfect competition and how the market equilibrium is attained.

Demand is *relationship* between the price and the quantity the buyer(s) is (are) *willing* and *able* to buy.

- At a given price, the quantity bought is called the *quantity demanded*.
- Statement: When price decreases the demand is higher

Change in Demand and Change in Quantity Demanded

- *Demand increases*: At a given price, the quantity demanded increases.
- *Quantity Demanded increases*: When price decreases the quantity demanded increases.

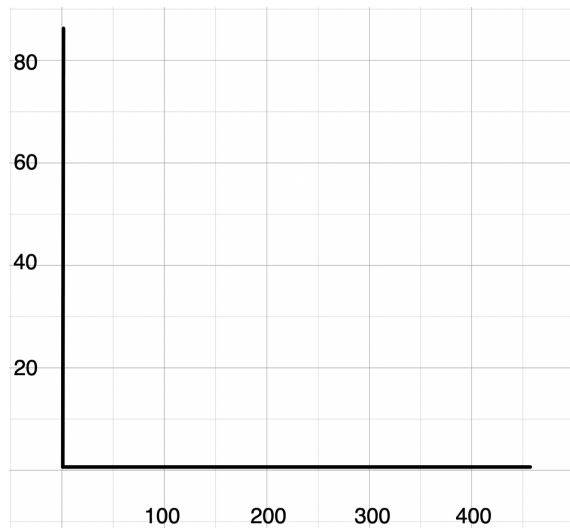
Law of Demand: Given all factors being equal, if the price decreases the quantity demanded increases.

- ⇔ Price and quantity demanded have inverse relationship
- ⇔ Demand curve has negative slope

Example: A demand curve is given by a function,

$$\text{Demand: } P = 70 - \frac{1}{5} Q_D$$

Plot of Demand Curve:



Factors that can change the Demand

1. Income
2. Population (number of buyers)

3. Taste of Consumers

4. Expectation

5. Prices of related goods

a. Substitutes:

b. Complementary:

Individual and Market Demands

- Market demand is the summation of individual demands of all consumers in the market.
- At each price, the quantity demanded of the market is sum of all quantities demanded of all consumers at that price.

Extreme Cases of Demand Curve

- Horizontal Demand

- Vertical Demand

HW How the demand increases in each of these extreme cases?

Example: What is the individual demand of a person who needs a lung transplant? Does the market demand has a negative slope?

Question: If individual demands of consumers are all horizontal but at different prices, what will be the market demand?