CHAPTER 4 - DEMAND

Section 1: What is Demand?

Section 2: Factors Affecting Demand

Section 3: Elasticity of Demand

Essential Questions:

1. How does the Law of Demand describe behavior?
2. What factors can change demand? How?
The BIG Idea
Responsibility, Choices, Changes, and Responsibilities

UNDERSTAND:

Markets exist when buyers and sellers interact, and market prices are set by the interaction of demand and supply.

You express demand for a product when you have the desire, are willing, and able to purchase it.

*Make a list of 5 items, and next to each one write why you bought it. Then write whether you would have bought more if the price had been lower, or fewer had the price been higher.
• Learning goals for Chapter 4 – Demand:
  – Explain the relationship of price and quantity
  – Analyze the relationship in a demand schedule & demand curve
  – Explain why price can only change quantity demanded
  – Explain the 6 factors can change demand
  – Identify the factors that influence the size of a change in quantity demanded
Section 1 Vocabulary – 9 words

- demand
- microeconomics
- market economy
- demand schedule
- marginal utility
- demand curve
- Law of Demand
- market demand curve
- diminishing marginal utility
Section 1 - What is Demand?

- **Demand** for a product is more than having the desire to own an item. Demand includes the ability and willingness to pay for it.

- **Microeconomics** is the part of economic theory that deals with behavior and decision making by individuals and firms.
  
  - Social science – study ways we behave & when things change
  
  - Explains how prices are determined & how decisions are made
An Introduction to Demand

Demand is a concept specifying the different quantities of an item that will be bought at different prices.

Demand is central to a market economy.

Demand involves two variables:

– Price

– Quantity of a specific product at a given point in time

• A demand schedule shows the various quantities demanded of a good at all prices that might prevail in the market at a given time.

• A demand schedule shown graphically is a demand curve.

• Demand is shown as a downward curve
Figure 4.1  The Demand for Compact Digital Discs

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity demanded</th>
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<tbody>
<tr>
<td>$30</td>
<td>0</td>
</tr>
<tr>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
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<tr>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

Demand Curve

A: Demand Schedule

B: Demand Curve

Price vs. Quantity

Points a and b on the curve indicate the relationship between price and quantity demanded.
The Law of Demand

There is an inverse relationship between the price of an item and the quantity demanded.

- Higher prices are associated with smaller amounts demanded on most goods or services we buy. This is the Law of Demand.
  - Quantity demanded varies inversely with its price.
- The market demand curve shows quantities demanded by everyone in the market who is interested in the product/service.
- Lower the price – larger amount demanded
- Higher the price – smaller amounts demanded
Figure 4.2  
Individual and Market Demand Curves

Mike’s Individual Demand Curve

Julia’s Individual Demand Curve

Market Demand Curve

*Note: The image contains graphs illustrating demand curves for Mike, Julia, and the market, with corresponding price and quantity axes.*
Demand and Marginal Utility

As we buy more of an item, we get less satisfaction from each additional purchase.

Utility is the amount of product satisfaction or usefulness one receives from its use.

- **Marginal utility** extra usefulness or additional satisfaction you get from getting or using 1 more unit of a product.

- As we use more of a product, we encounter **diminishing marginal utility**, extra usefulness or satisfaction we get declines.
Section 2 Vocabulary – 6 words

• change in quantity demanded
• income effect
• substitution effect

• change in demand
• substitutes
• complements
Section 2 – Factors affecting & changing demand

When there is changes in consumers demands – companies need to change too

Only a change in price can cause a change in quantity demanded.

When only the price changes and all else remains constant, there is a **change in the quantity demanded**.

– **Income effect** – extra income or not enough income

– **Substitution effect** – replaces costly items w/ a less costly one (CD versus concert tickets)

A change in quantity demanded is a movement along the original demand curve.
Change in Demand

Several factors can cause the demand curve to shift.

Factors other than price can cause a change in demand.

A change in demand results in an entirely new demand curve.

People buy different amounts of the product at the same price. (change in demand)
Change in Demand (cont.)

- Factors for demand changes:
  - Consumer income
    - Increase (afford to buy more at all prices) or Decrease (buy less)
  - Consumer tastes
    - Advertising, Fashion trends, Changes in season & New technology or new products
  - Price of related goods
    - **Substitutes** – butter/margarine, Coke/Pepsi, tea/coffee
      - Rise in butter prices – more demand for margarine
      - Demand goes down for a product if price goes down of its substitute
    - **Complements** – PB/jelly, printer/ink, sneakers/laces
      - Lower prices tend to buy more of each
      - Higher price of a product then decrease demand for other
  - Expectations
    - Items coming out soon or buy more because of weather
  - Numbers of consumers
Section 3 Vocabulary – 5 words

- elasticity
- demand elasticity
- elastic
- inelastic
- unit elastic
Section 3 - Demand Elasticity

Cause-and-effect relationship in economics is **elasticity**, which measures responsiveness. (Rubber band)

When the price of an item changes, the change in quantity demanded can vary a little or a lot.

Consumers react to changes in price by changing the quantity demanded. The size of the reaction is **demand elasticity**.

- Demand can be:
  - **Elastic** larger change — fresh produce, ice cream, or coffee
  - **Inelastic** smaller change / can’t live w/out it — table salt, gas, car, or medicine
  - **Unit elastic** — proportional change
The Total Expenditures Test

The total expenditures test is used to estimate the demand elasticity of a product.

- Total expenditures—the price of a product multiplied by the quantity demanded for any point along the demand curve.
- Can test for elasticity by observing the change in total expenditures when the price changes. Three results occur:
  - Elastic demand—an “inverse” relationship between price and expenditures
The Total Expenditures Test (cont.)

- Inelastic demand—movement occurs in the same direction
- Unit elastic—no change in expenditure

• Elasticity and revenues
  - Raising the price of an inelastic product may help increase revenue.
  - Raising the price of an elastic product will likely decrease revenue.
Determinants of Demand Elasticity

The answers to three questions help determine a product’s demand elasticity.

• Must answer three questions to determine if a demand for a good is elastic or inelastic.
  – Can the purchase be delayed?
  – Are adequate substitutes available?
  – Does the purchase use a large portion of income?
### Figure 4.6 Determinants of Demand Elasticity

<table>
<thead>
<tr>
<th>Determinants of elasticity</th>
<th>Fresh tomatoes, corn, or green beans</th>
<th>Table salt</th>
<th>Gasoline from a particular station</th>
<th>Gasoline in general</th>
<th>Services of medical doctors</th>
<th>Insulin</th>
<th>Butter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can purchase be delayed?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Are adequate substitutes available?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Does purchase use a large portion of income?</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Type of elasticity</td>
<td>Elastic</td>
<td>Inelastic</td>
<td>Elastic</td>
<td>Inelastic</td>
<td>Inelastic</td>
<td>Inelastic</td>
<td>Elastic</td>
</tr>
</tbody>
</table>