GJSM

DEMAND ANALYSIS

Demand & Law of Demand

LEARNING OBJECTIVES

- After completing this chapter student should be able to:
  - Understand the nature of demand and the Law of Demand
  - Trace the difference between demand schedule and demand curve
  - Explain the exceptions to Law of Demand
  - Explain the difference between shift in demand curve and movements along demand curve

MEANING OF DEMAND

Quantity demanded is the amount of a good that buyers are willing and able to purchase at a point of time at one specified price

Demand is a full description of how the quantity demanded changes as the price of the good changes

TYPES OF DEMAND

- Price demand
- Income demand
- Cross demand
- Joint Demand or complementary demand
- Composite Demand
- Direct & Derived Demand
- Competitive Demand
- Consumers' Goods demand
- Producers' Goods Demand

Law of demand

Law of demand states that "*other things being equal*, as price increases, the corresponding quantity demanded falls".

Law of demand restated, "there is an inverse relationship between price and quantity demanded".

- **Note the "*other-things-equal*" assumption refers to consumer income and tastes, prices of related goods, and other things except the price of the product being discussed.**
- **Also does not tell the degree of change**

ASSUMPTIONS

- No change in price of related goods
- No change in income of consumer
- No change in tastes & preferences of consumer
- No change in expectations of consumer related to future prices
- No change in government policy
- No change in demographic composition of population

Determinants of demand

This is what we mean by "other things":

a. Tastes
b. Number of buyers
c. Income
d. Prices of related goods
   - *Substitute goods*
   - *Complementary* goods
e. Expectations
f. Discoveries
g. Money Supply
h. Saving

There are two common ways of representing Law of Demand:

- The demand schedule
- The demand curve

DEMAND SCHEDULE

- It is a table that shows different prices of a good and the quantity of that good demanded at each of these prices.
- It has two aspects
  - Individual Demand schedule
  - Market Demand schedule

Individual Demand Schedule

Price of the good	Quantity of the good (units)
5	10
4	20
3	35
2	55
1	80

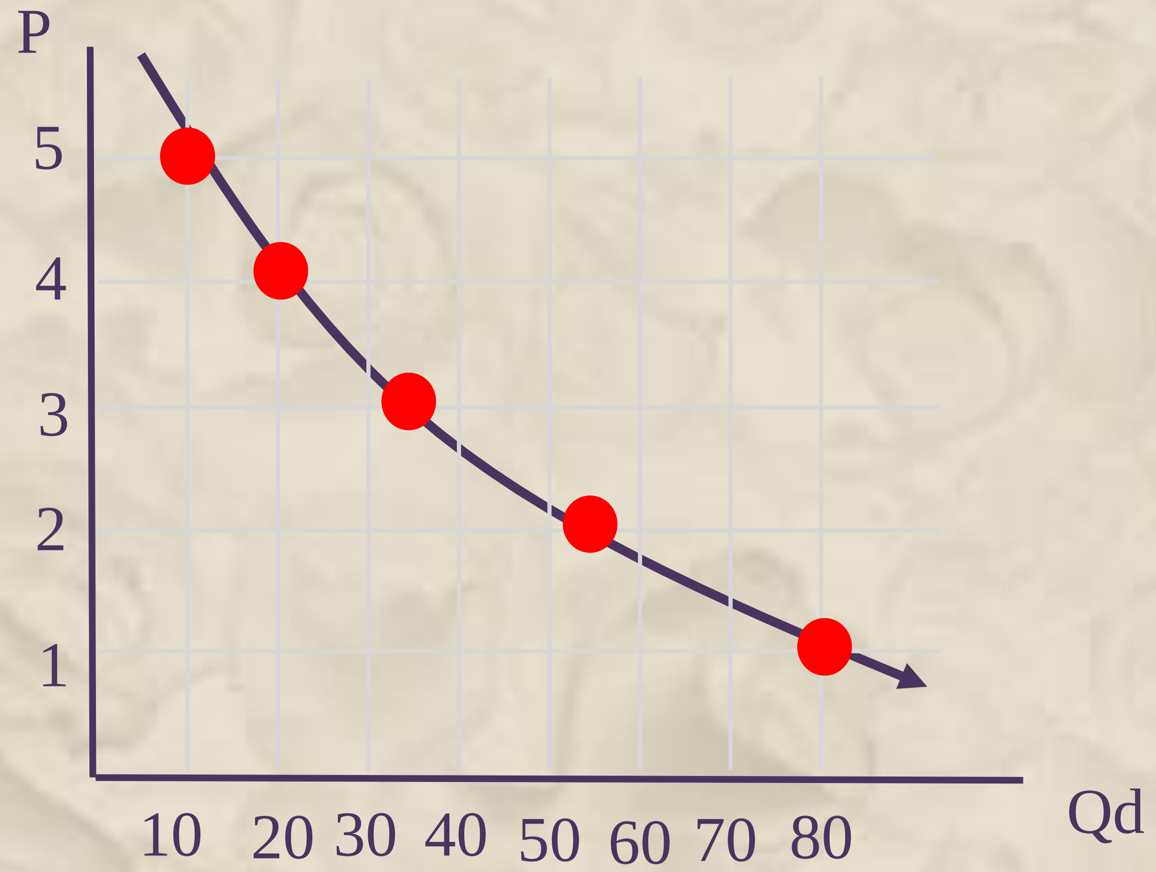
THE DEMAND CURVE:

The curve which shows the relation between the price of a commodity and the amount of a commodity that the consumer wishes to purchase, is called demand curve.

- It is also of two types:
  - Individual demand curve
  - Market demand curve

INDIVIDUAL DEMAND CURVE

P	Qd
5	10
4	20
3	35
2	55
1	80



The demand curve

1. Illustrates the inverse relationship between price and quantity.

2. The downward slope indicates lower quantity at higher price and higher quantity at lower price, reflecting the Law of Demand.

THE LAW OF DEMAND—EXPLANATIONS

There are two ways to explain the Law of Demand

- Substitution effect
- Income effect

THE SUBSTITUTION EFFECT

- The **substitution effect** is the change in consumption resulting from a change in the price of one good relative to the price of other goods.

- The lower the price of a good, the smaller the sacrifice associated with the consumption of that good

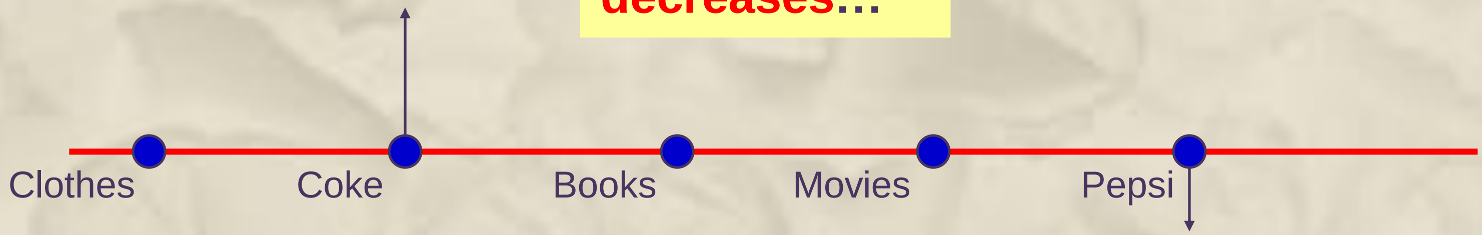
SUBSTITUTION EFFECT

When the price of a good decreases, consumers substitute that good instead of other competing (substitute) goods

1. When the price of Coke decreases…

2. Consumption of Pepsi decreases…

3. Consumption of Coke increases



THE INCOME EFFECT

- The **income effect** describes the change in consumption resulting from an increase in the consumer's real income, or the income in terms of the goods the money can buy.
- **Real income** is the consumer's income measured in terms of the goods it can buy.

INCOME EFFECT

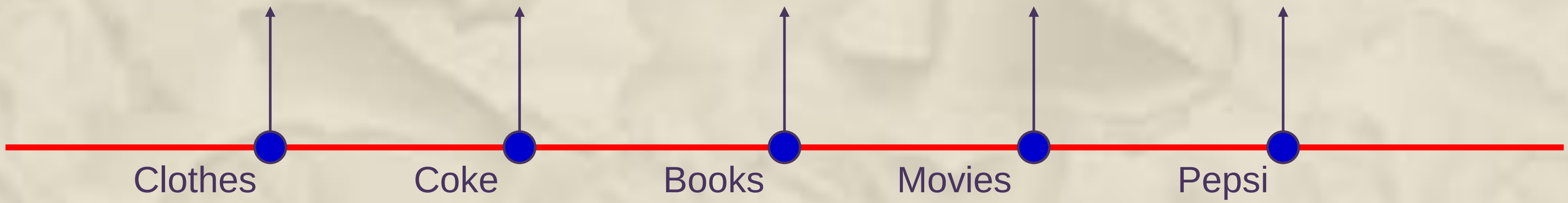
Consumers respond to a decrease in the price of a commodity as they would to an increase in income

They increase their consumption of a wide range of goods, including the good that had a price decrease

1. When the price of Coke decreases…

2. Consumers feel richer…

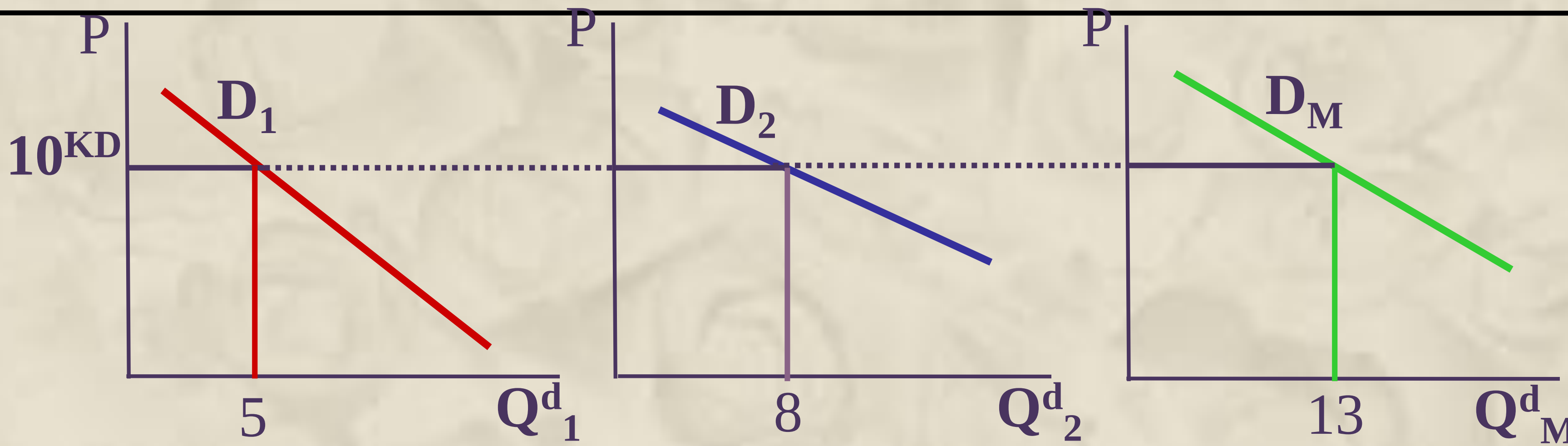
3. Consumption of Coke and other goods increases



MARKET DEMAND VERSUS INDIVIDUAL DEMAND

Market demand refers to the sum of all individual demands for a particular good or service.

Graphically, individual demand curves are summed horizontally to obtain the market demand curve.



Consumer (1): at price (10) demands (5) units

Consumer (2): at price (10) demands (8) units

Market Demand: at price (10) the demand is (13) units

SHIFTS IN THE MARKET DEMAND CURVE

… are caused by changes in:

Consumer income

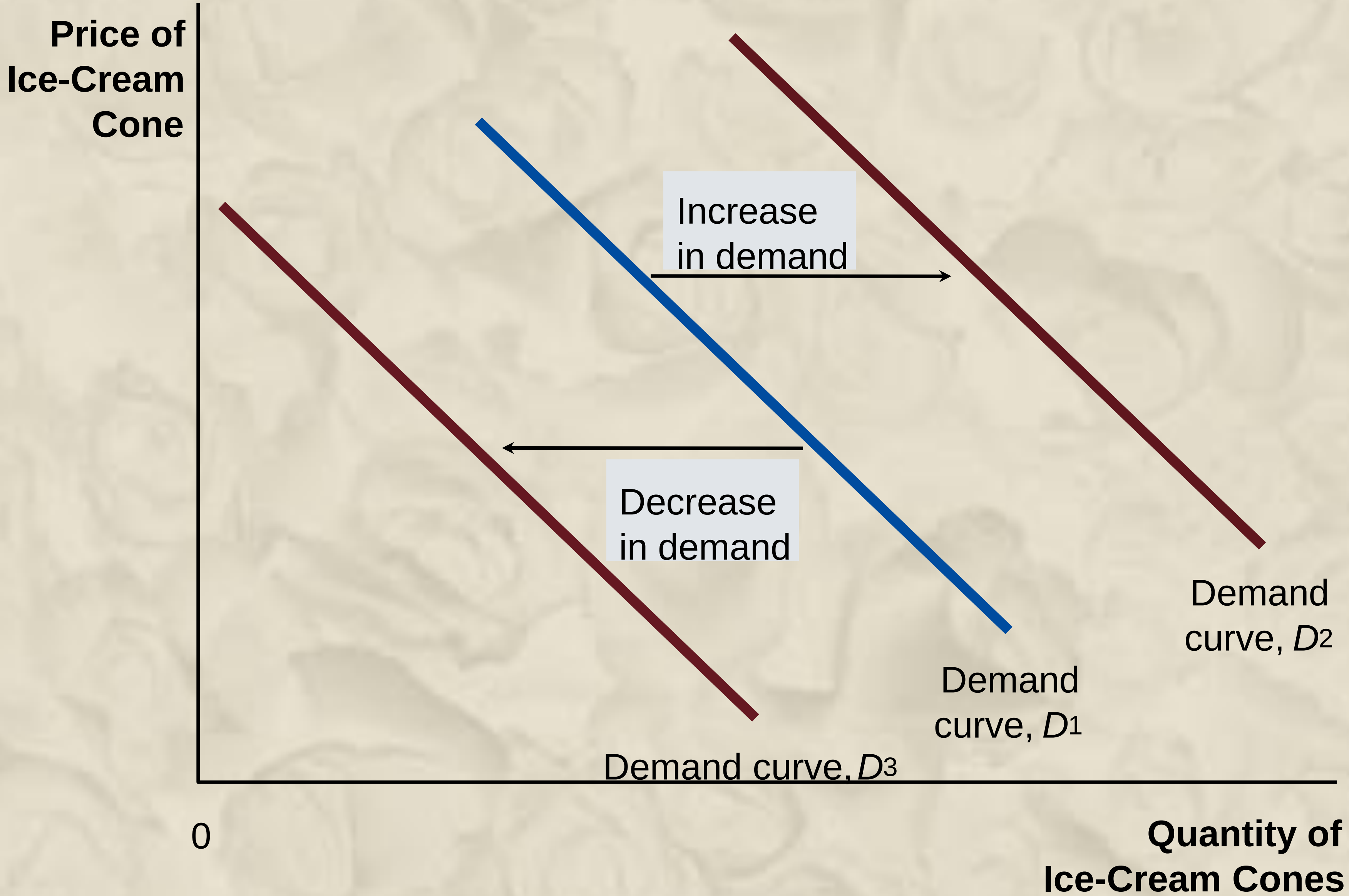
Prices of related goods

Tastes

Expectations

Number of buyers

FIGURE 3 SHIFTS IN THE DEMAND CURVE

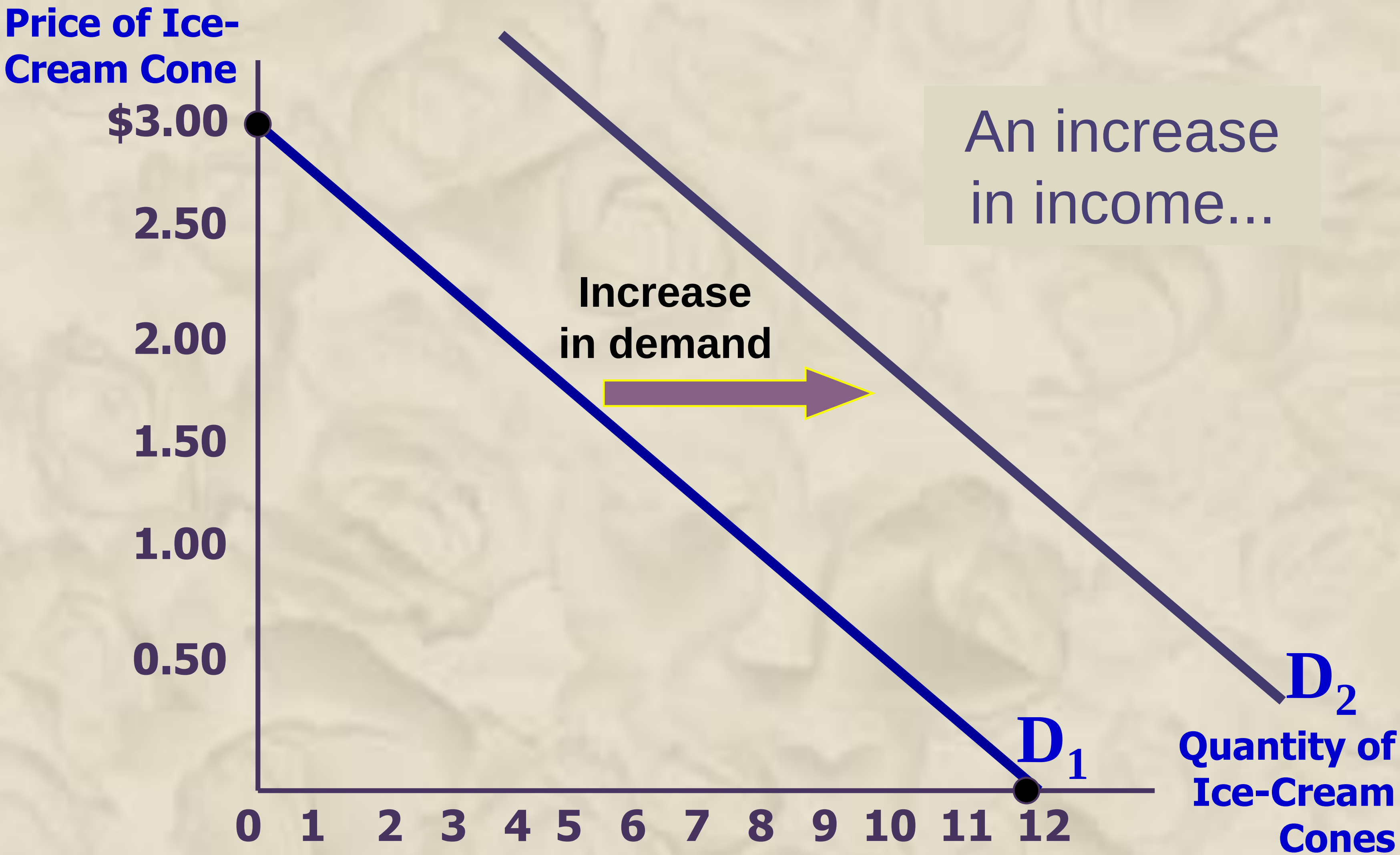


SHIFTS IN THE DEMAND CURVE

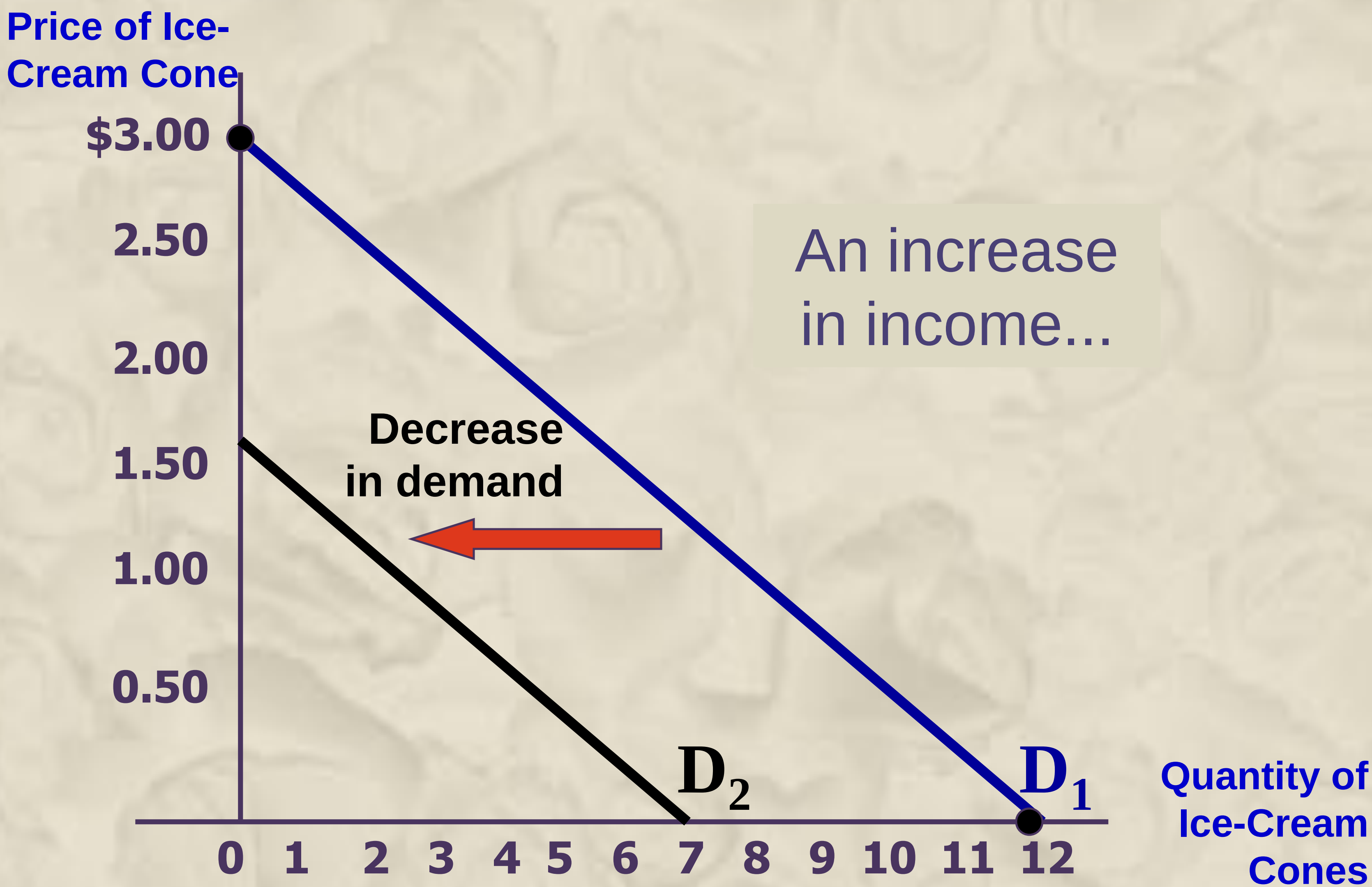
Consumer Income

- As income increases the demand for a *normal good* will increase
- As income increases the demand for an *inferior good* will decrease

CONSUMER INCOME
NORMAL GOOD



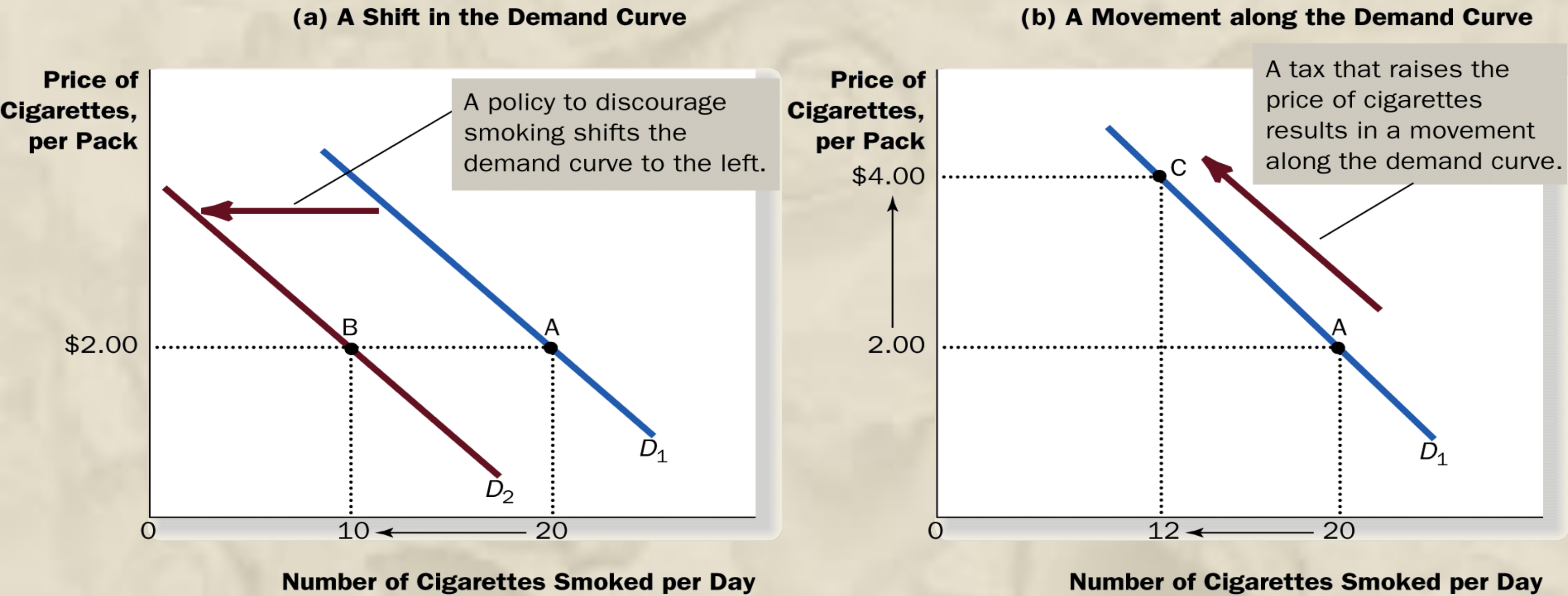
CONSUMER INCOME
INFERIOR GOOD

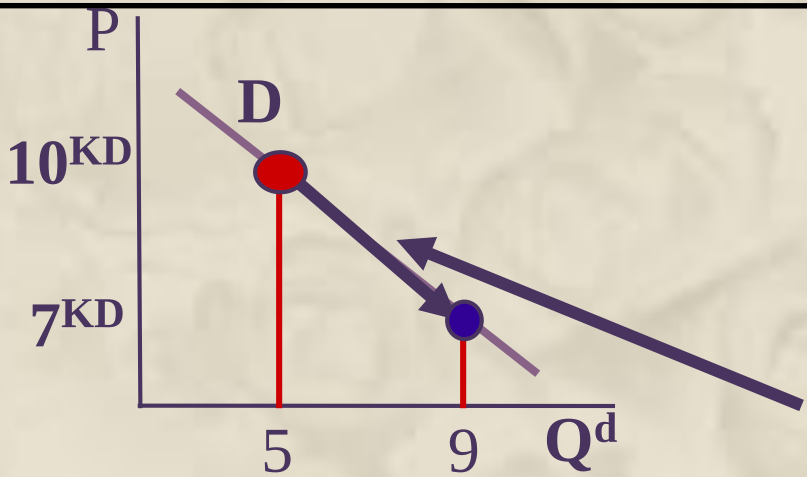


VARIABLES THAT INFLUENCE BUYERS

Variable	A Change in This Variable . . .
Price	Represents a movement along the demand curve
Income	Shifts the demand curve
Prices of related goods	Shifts the demand curve
Tastes	Shifts the demand curve
Expectations	Shifts the demand curve
Number of buyers	Shifts the demand curve

FIGURE 4 SHIFTS IN THE DEMAND CURVE VERSUS MOVEMENTS ALONG THE DEMAND CURVE





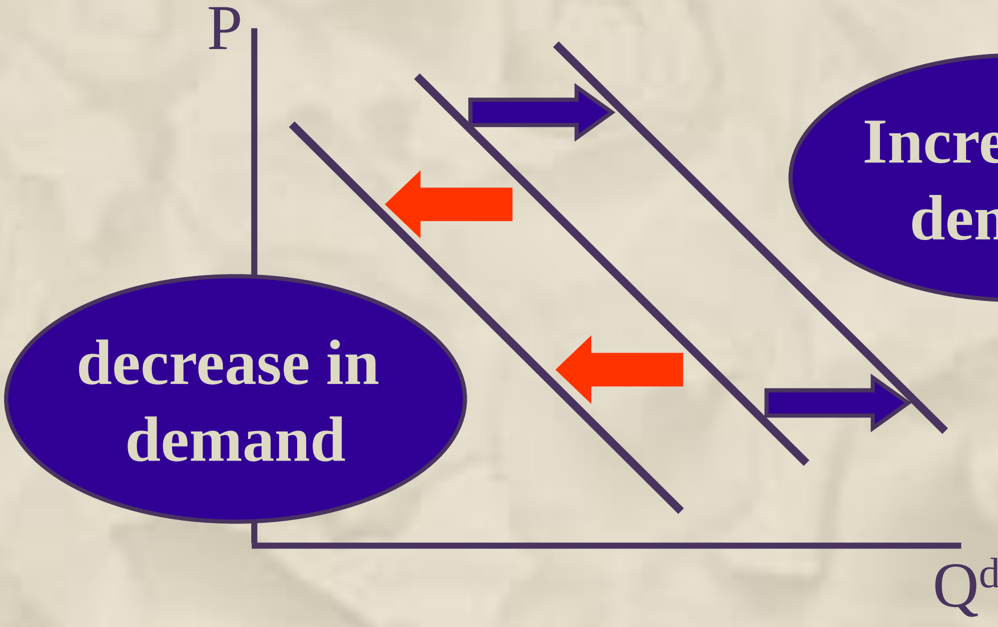
Change in prices of the good will always lead to changes in quantity demanded!

This is shown by a movement along the demand curve

As price falls from 10 to 7, Q^d increases from (5) to (9) units

Recall: inverse relationship between P and Q^d

Changes in **determinants of demand** will shift the demand curve!



Note that prices are CONSTANT

WHAT CAN CAUSE AN INCREASE IN DEMAND.

a. Favorable change in consumer tastes.

b. Increase in the number of buyers.

c. Rising income if product is a normal good.

d. Falling incomes if product is an inferior good.

e. Increase in the price of a substitute good.

f. Decrease in the price of a complementary good.

g. Consumer expectation of higher prices or incomes in the future.

WHAT CAN CAUSE A DECREASE IN DEMAND

a. Unfavorable change in consumer tastes.
b. Decrease in number of buyers.
c. Falling income if product is a normal good.
d. Rising income if product is an inferior good.
e. Decrease in price of a substitute good.
f. Increase in price of a complementary good.
g. Consumers expectation of lower prices or incomes in the future.
h. Review the distinction between a change in quantity demanded caused by price change and a change in demand caused by change in determinants.

EXERCISE

- True/ False
  - … If more is demanded at the same price, the fact is known as increase of demand
  - … Demand curve is always negatively sloping
  - … A decrease in the price of the complementary product shall increase the demand for the given product
- By increase in demand we mean………
- In the typical demand schedule, quantity demanded varies ……………..