Theory of Demand

- Meaning of Demand
- Determinants of Demand
- Demand Curve
- Law of Demand
- Shift in Demand Curve
- Types of Goods
- Elasticity of Demand
- Factors Affecting Elasticity of Demand

What is Demand

- Demand is an economic concept that refers to the amount of goods and services that consumers are willing and able to buy

- Demand = Desire + Ability to pay + Willingness to pay

- Demand is a relative concept; not absolute. It is related to price, time and place.

Types of Demand

Individual Demand

- It refers to the quantity demanded of a commodity by a single firm or consumer. It a component of the market demand.

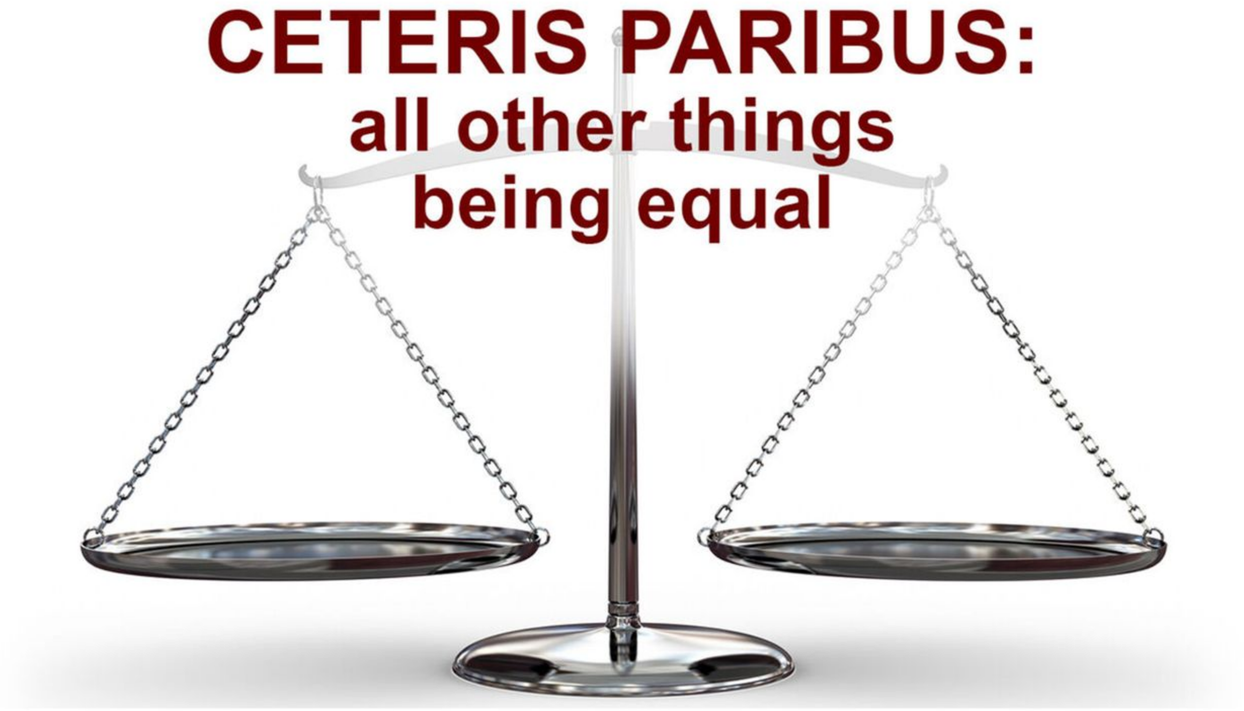
- The individual demand curve is relatively steeper.

- It has narrower scope as it is related to the taste and preferences of a consumer only.

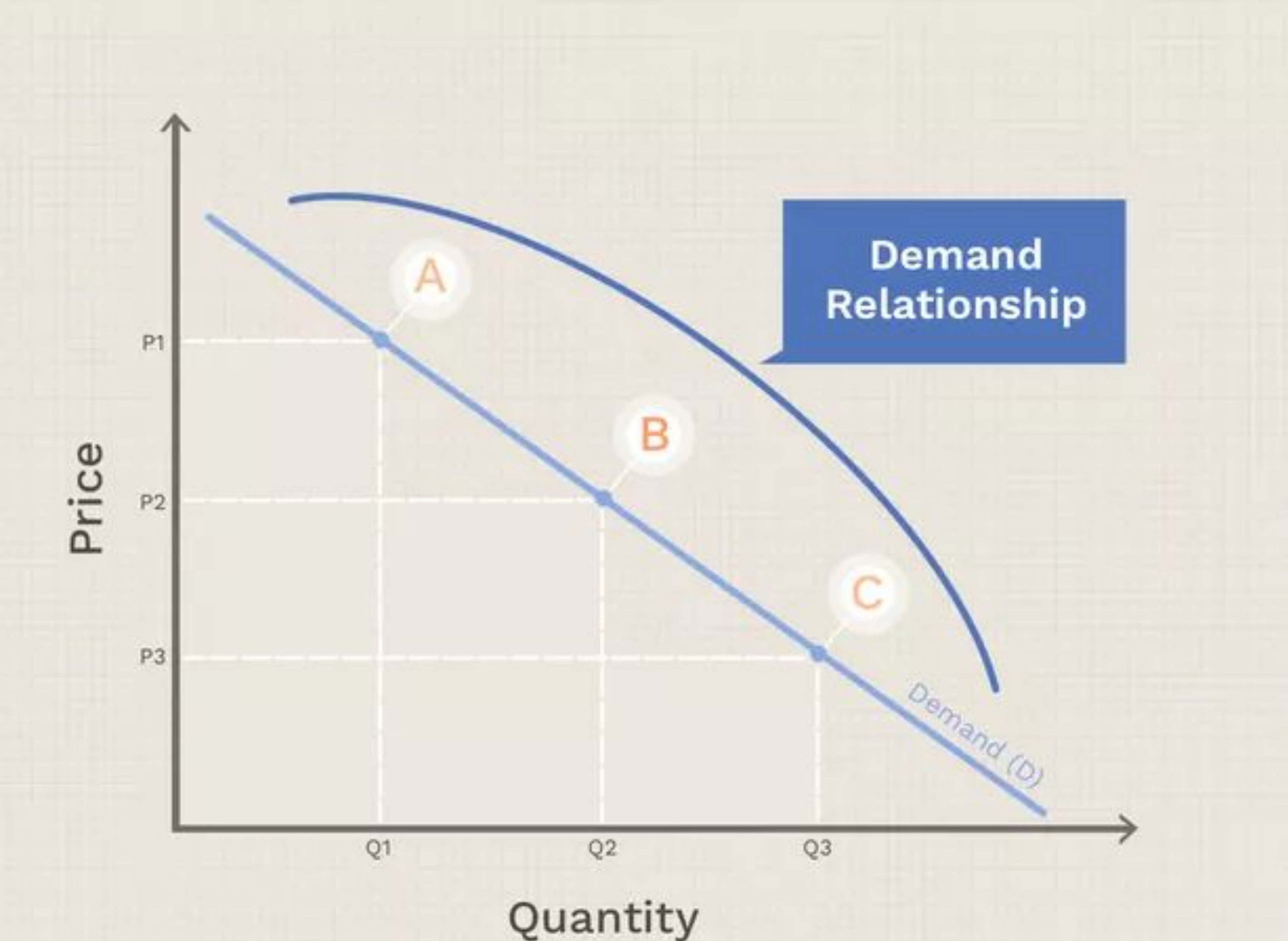
- It refers to different quantities of a commodity preferred by an individual at different prices in the market.

Market Demand

- It refers to the quantity demanded of a commodity by all the consumers and firms in the market.
- It is the aggregation of the individual demands.
- The market demand curve is relatively flatter.
- It has a broader scope as it is related to the tastes and preferences of all the consumers.


CETERIS PARIBUS:
all other things
being equal

Law of Demand



Why Demand Curve Slopes Downward?

1. Law of diminishing marginal utility

When a consumer buys more units of a commodity, the marginal utility of the commodity continues to decline. Therefore, the consumer will buy more units of that commodity only when its price falls. This proves that the demand will be more at a lower price and it will be lesser at a higher price.

2. Substitution effect

With the fall in the price of a commodity, the price of substitute remaining the same, consumers will buy more of this commodity rather than the substitute.

3. Income effect

When the price of a commodity falls the real income of the consumers increases because he has to spend less in order to buy the same quantity. On the contrary, with rise in the price of the commodity, the real income of the consumer falls.

4. Entry and exit of consumers

When the price of a commodity falls new consumers start consuming it, as a result the demand increases .On the contrary, with the increase in the price of the product, many consumers will either reduce or stop its consumption.

5. Different uses of commodities

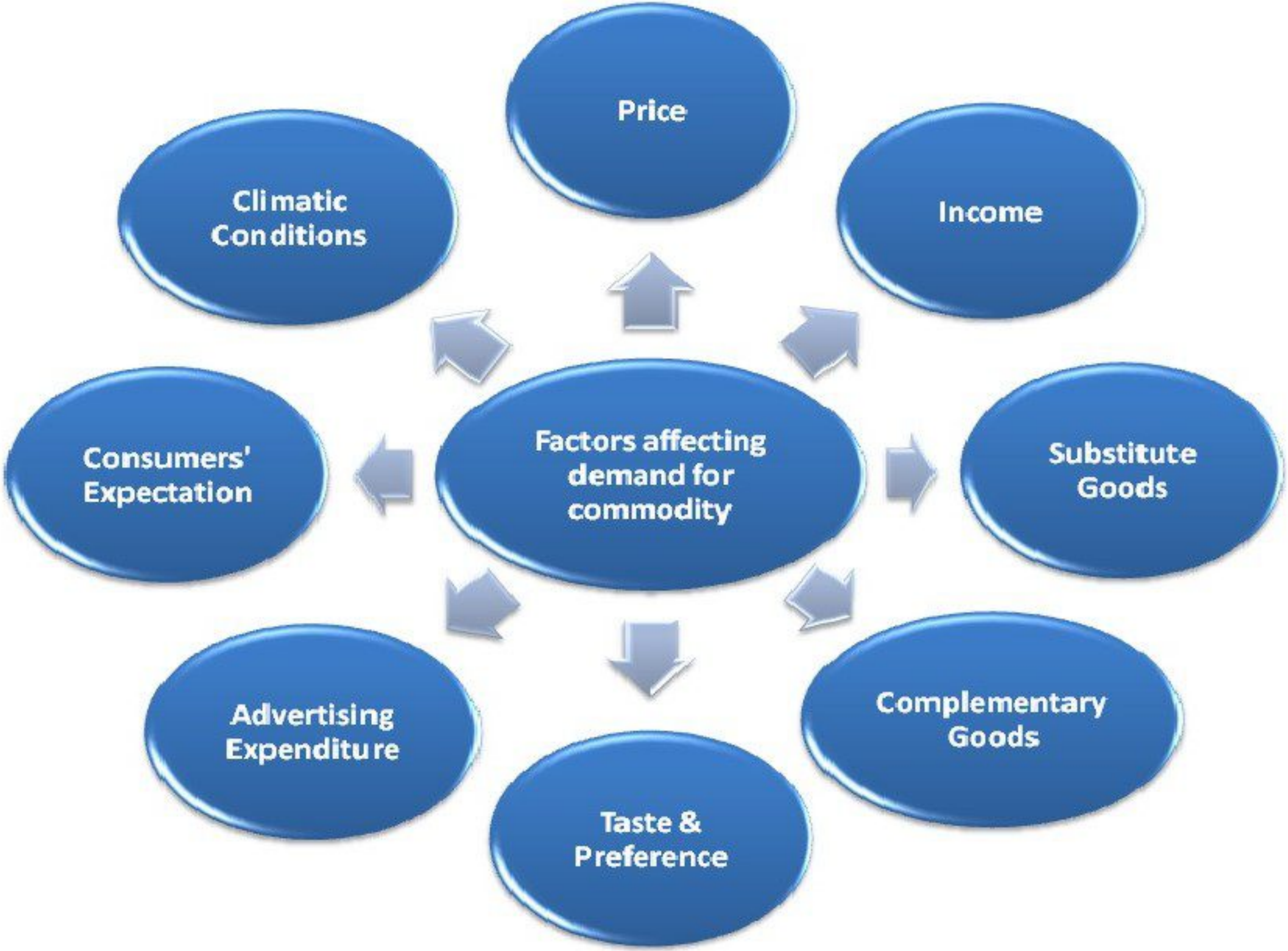
With the increase in the price of such products, they will be used only for more important uses and their demand will fall. On the contrary, with the fall in price, they will be put to various uses and their demand will rise.

6. Supply of Commodities

Supply of commodities also plays a vital role in determining the shape of a demand curve. If supply of a commodity is limited, then only those people who can afford a high price are able to buy

Basic Assumption of Law of Demand

1. No Change in Income.
2. No Change in Size and Composition of the Population.
3. No Changes in the Prices of the Related Goods.
4. No Changes in Consumer's Tastes and Preferences, etc.
5. No Expectation of a Price Change in Future.
6. Government policy remains constant


Price
Climatic Conditions
Income
Consumers' Expectation
Factors affecting demand for commodity
Substitute Goods
Advertising Expenditure
Complementary Goods
Taste & Preference

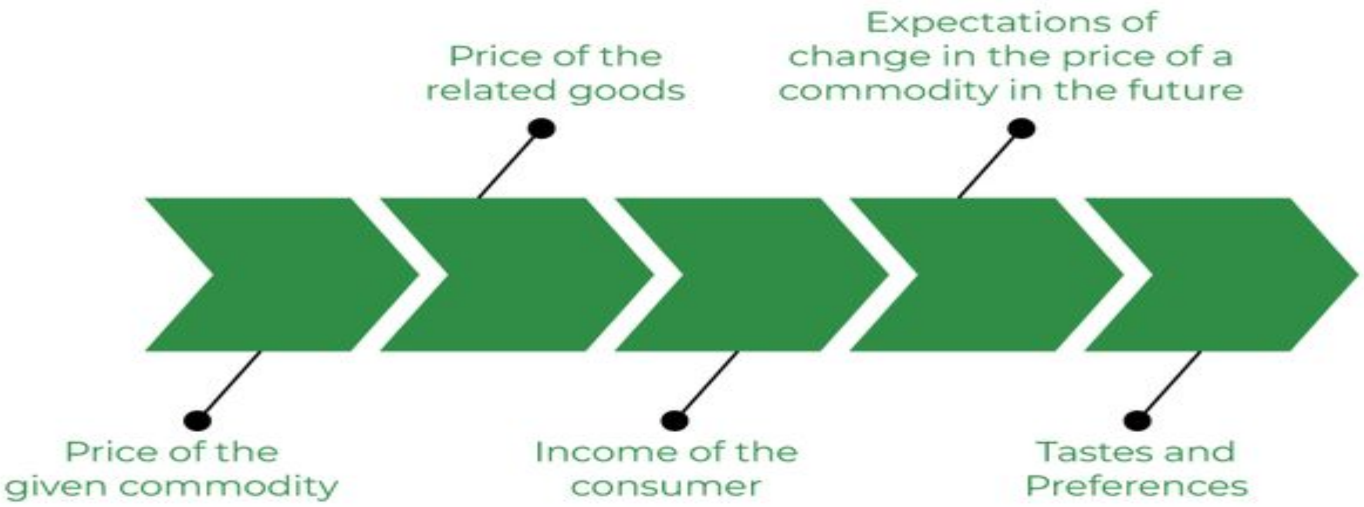
Demand Function

Demand function expresses the functional relationship between demand of the commodity and various factors affecting it. In other words, it describes the relationship between quantities of the commodities which consumers demand during a specified period and the factor which affects the demand.

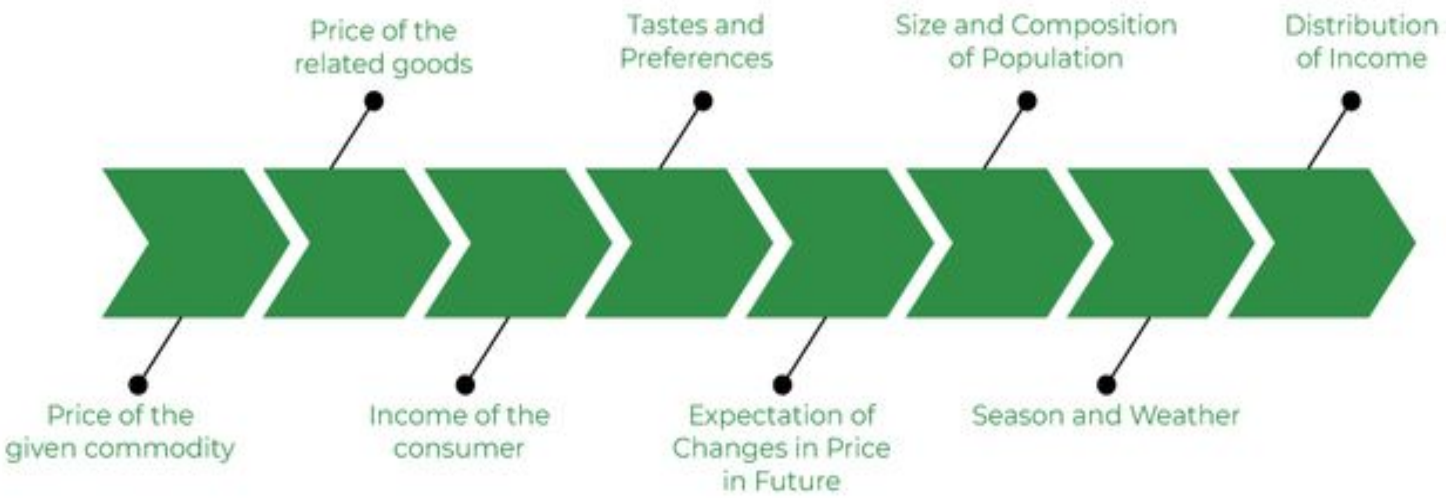
Individual Demand Function: $D_x = f\,(P_x, P_r, Y, T, F)$

Market Demand Function: $D_x = f(P_x, P_r, Y, T, F, P_D, S, D)$

Determinants of Individual Demand



Determinants of Market Demand



Demand Schedule

A Demand Schedule is a table that shows the quantity demanded of a good or service at different price levels.

Price of commodity	Quantity of 'Y' demanded Kgs.			Market demand
Y' Rs	Consumer L	Consumer M	Consumer N	L+M+N
20	2	4	6	12
16	4	6	8	18
12	6	8	10	24
8	8	10	12	30
4	10	12	14	36

Exceptions of the law of demand

1. Giffen goods

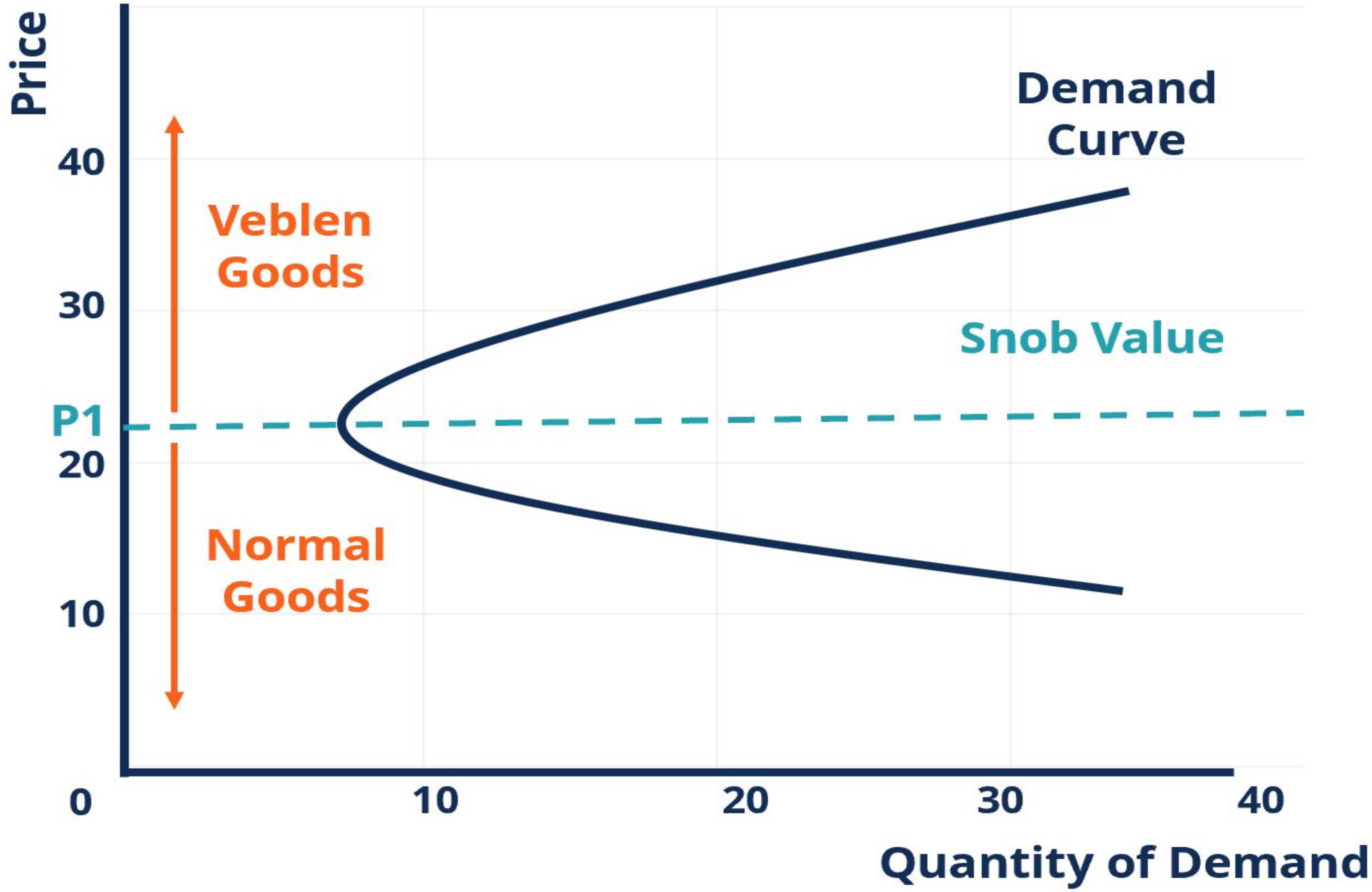
The goods that increase consumption as the price increases are known as the Giffen good. Thus, it violates the law of demand by showing an upwards-sloping curve of the demand.

- The good is a basic necessity, typically food, for the population.
- Consumers spend a significant portion of their income on this good.
- There are no close substitutes for the good.
- The good is mostly inferior, meaning people would prefer to consume less of it as their income rises (In some rare case it can be a normal good also).

2. Luxury Goods (Veblen Goods)

- A Veblen good is a good for which demand increases as the price increases.
- They are high-quality goods that are well made, exclusive, and a status symbol.
- Generally sought after by affluent consumers who place a premium on the utility of the good.

Snob Effect of Veblen Goods



3. Price change expectations

When there is a drop in price or value or expected to drop further, the end consumers may defer or postpone the buy to profit from the advantages of a lower cost.

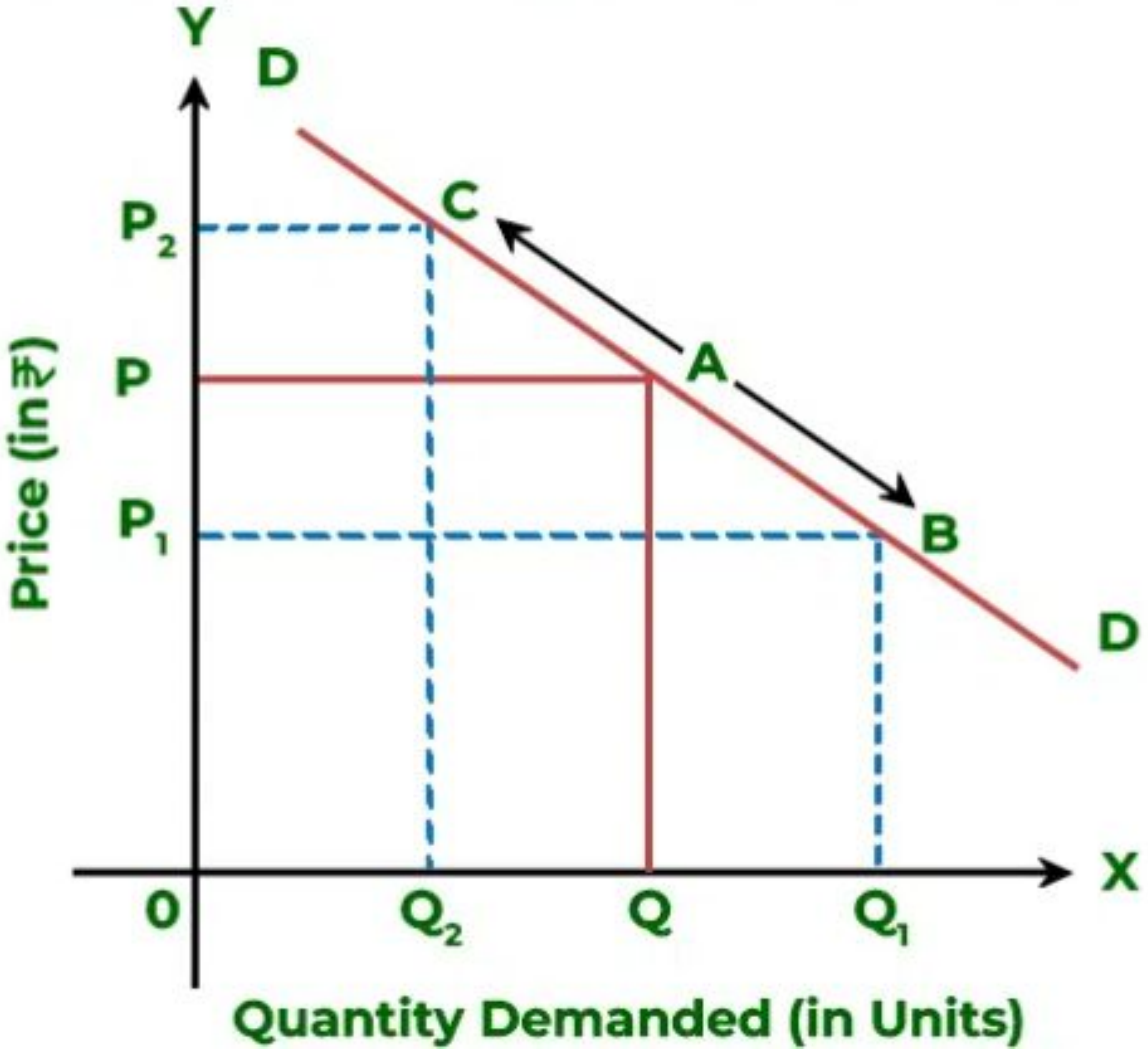
4. Necessities

One more exception case for the law of demand is the essential or necessity goods and products (E.g. life saving drugs).

5. Change in Income

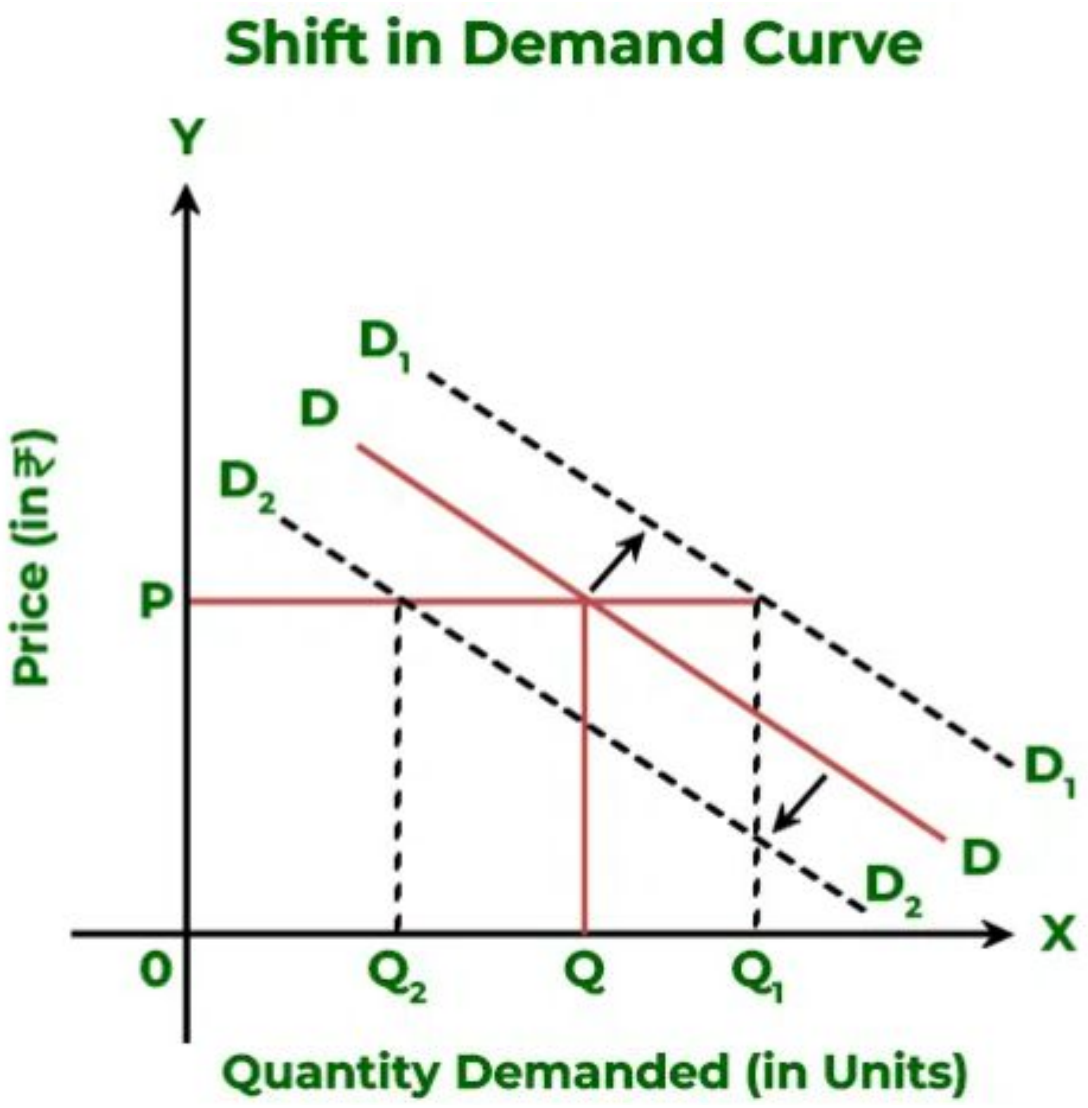
There will be a change in the behavioural purchase of goods and services according to the changes in personal income.

Movement along the Demand Curve



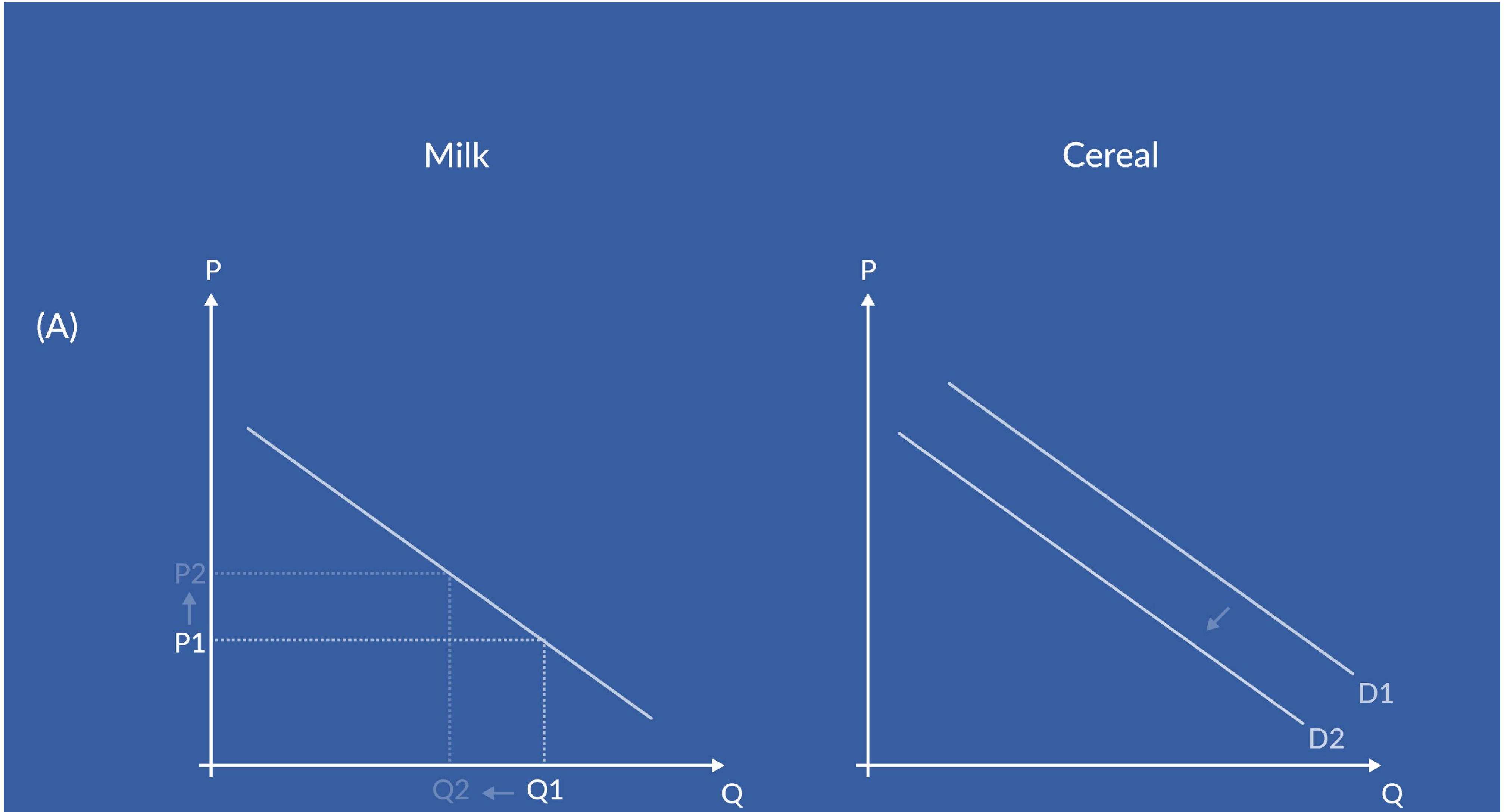
Shifts in the Demand Curve

A shift in the demand curve occurs when a determinant of demand other than price changes. It occurs when demand for goods and services changes even though the price didn't.

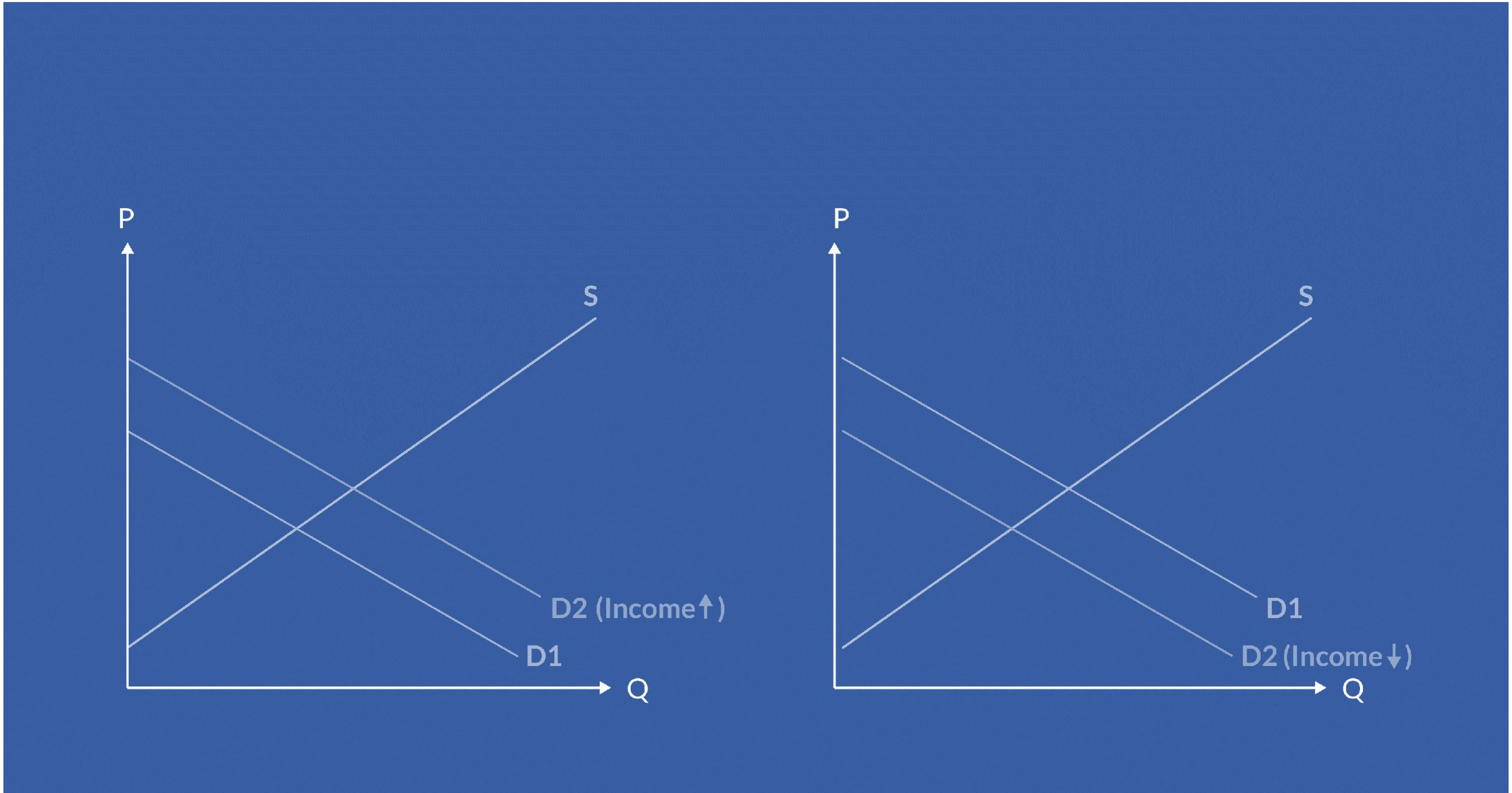


Shift in Demand Curve due to Price Change in Substitute Good

Shift in Demand Curve due to Price Change in Complementary Good



Shift due to change in Income Level of the Buyers



Price Elasticity of Demand

What is Elasticity of Demand

- The responsiveness of the quantity demanded of a commodity to changes in one of the variables on which demand depends.

- The variables on which demand can depend on are:

Price of the commodity

Prices of related commodities

Consumer's income , etc.

Change in promotional expenses

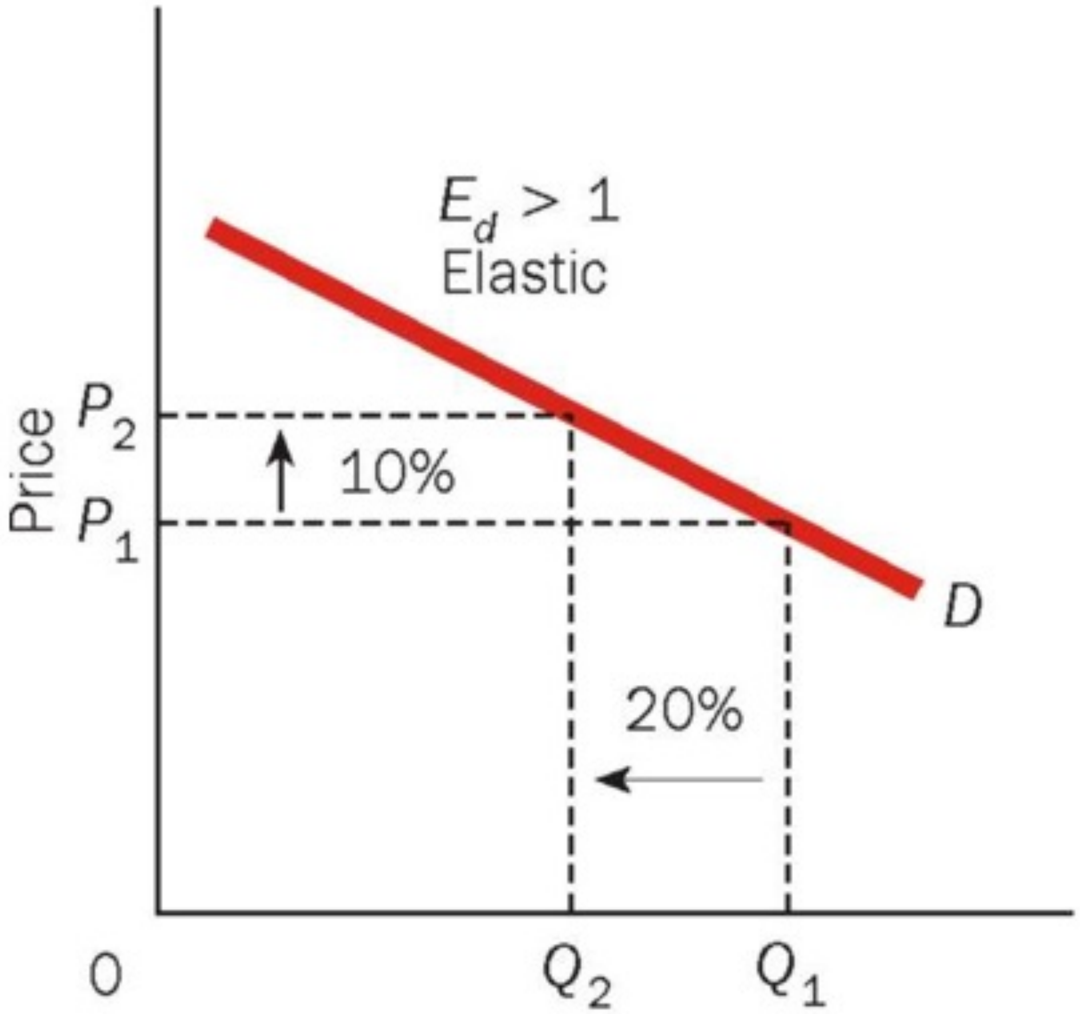
Price Elasticity of Demand

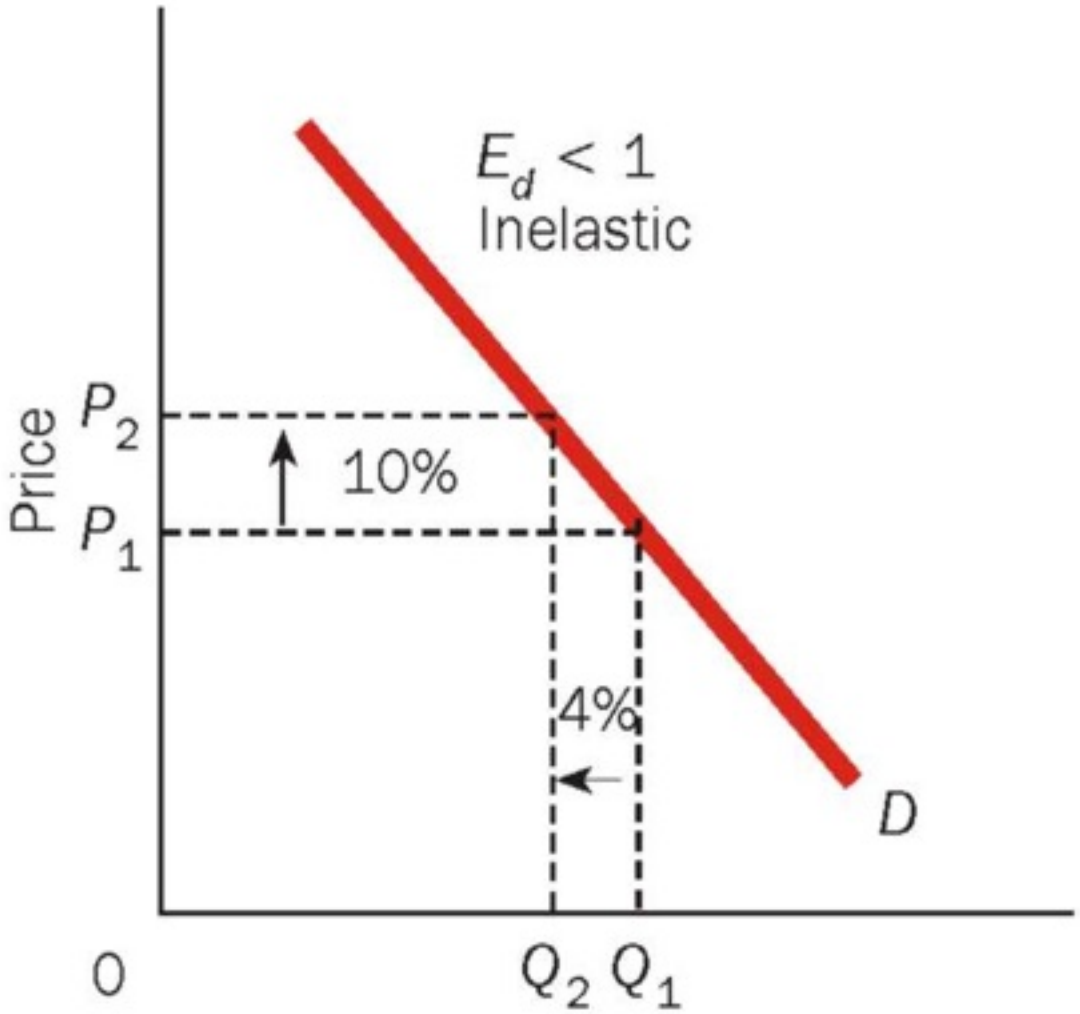
- Price elasticity of demand measures how the change in a product's price affects its associated demand.

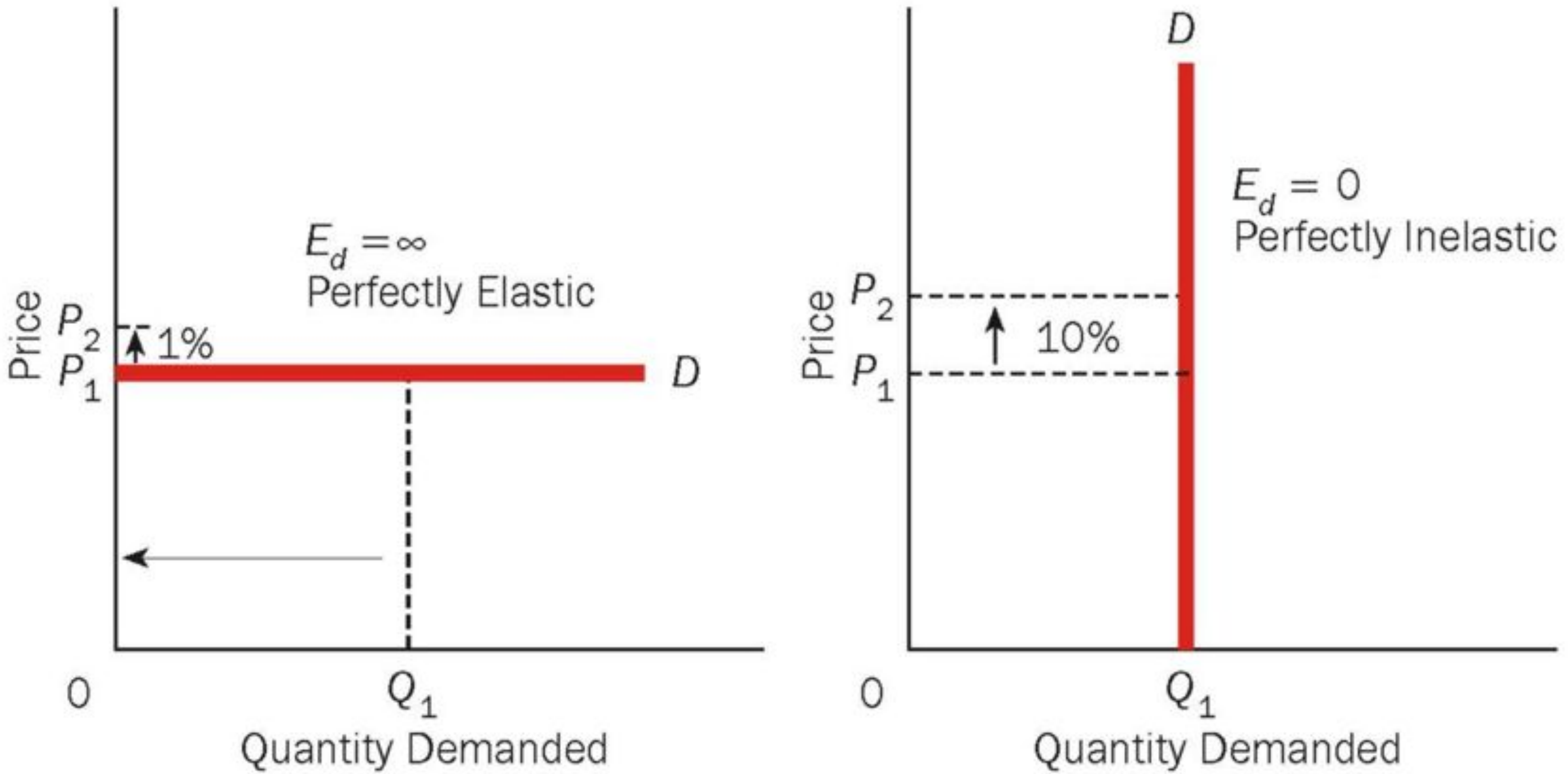
$$PED = \text{abs}\left(\frac{\%\Delta \text{ Quantity Demanded}}{\%\Delta \text{ Price}}\right)$$

- Price elasticity of demand is always provided as an absolute value, or positive value, as we are interested in its magnitude.

Degree of Elasticities

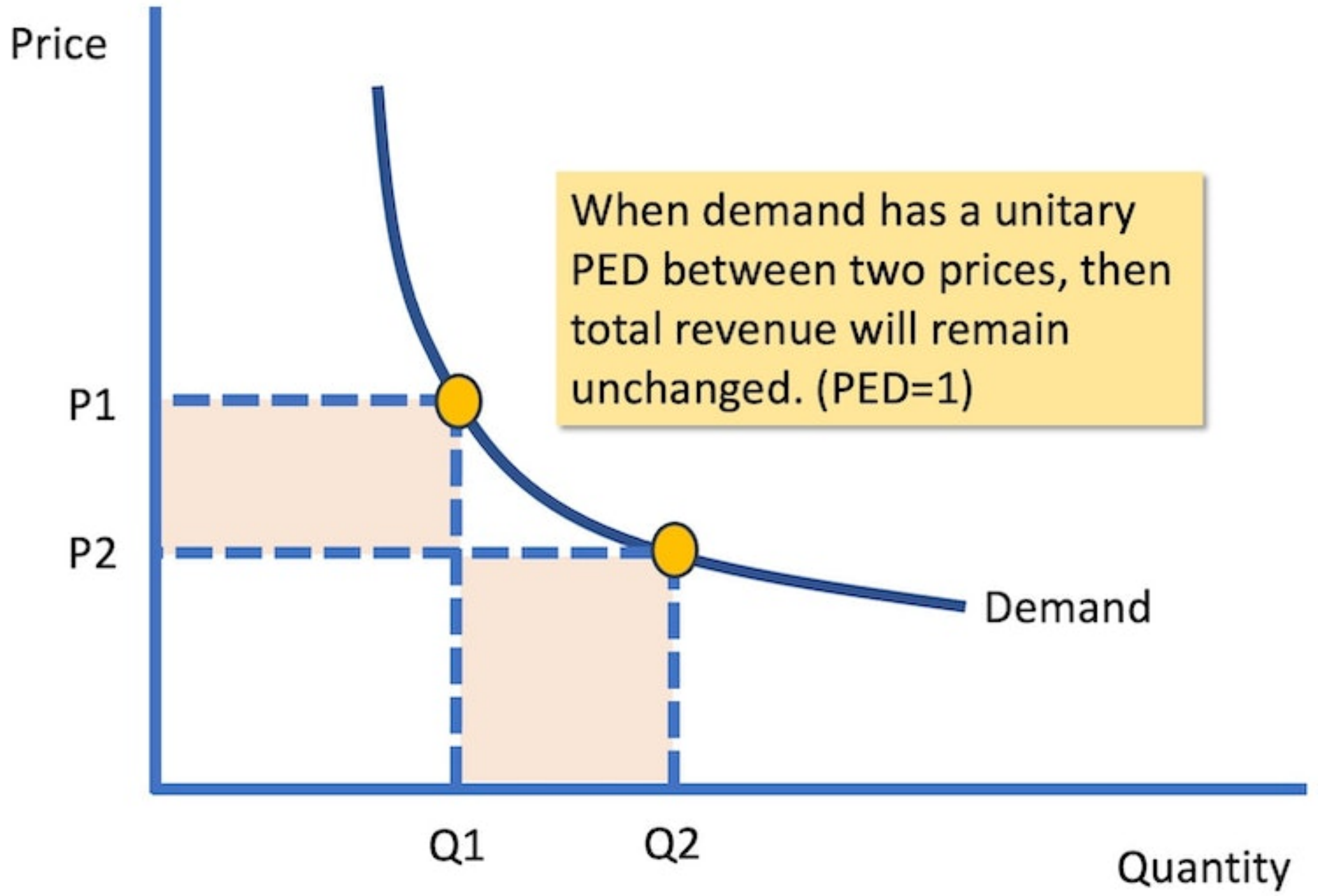






Price
P_2
P_1
1%
$E_d = \infty$
Perfectly Elastic
D
0
Q_1
Quantity Demanded
D
$E_d = 0$
Perfectly Inelastic
Price
P_2
P_1
10%
0
Q_1
Quantity Demanded

Unit elastic demand curve



Factors Affecting Price Elasticity of Demand

- Nature of the commodity *(necessities; inelastic)*
- Availability of the substitutes *(more substitutes; more elasticity)*
- Income level of the consumer *(higher income; less elasticity)*
- Level of price *(expensive commodity; more elasticity)*
- Deferred Consumption *(Scope of delay; more elasticity)*
- Number of uses of the commodity *(Multiple uses; more elasticity)*
- Share in total expenditure *(higher the proportion; more is elasticity)*
- Time period *(inelastic in short-run; elastic in long-run)*
- Habits *(habitual commodities; less elasticity)*

Review Question

What is the most likely effect of the development of television, videocassette players, and rental movies on the movie theater industry?

A) decreased costs of producing movies

B) increased demand for movie theater tickets

C) movie theater tickets become an inferior good

D) increased price elasticity of demand for movie theater tickets

Answer: D

Review Question

If an increase in the supply of a product results in a decrease in the price, but no change in the actual quantity of the product exchanged, then:

A) the price elasticity of supply is zero.

B) the price elasticity of supply is infinite.

C) the price elasticity of demand is unitary.

D) the price elasticity of demand is zero.

Answer: D

Review Question

If the price elasticity of demand for a product is equal to 0.5, then a 10 percent decrease in price will:

A) increase quantity demanded by 5 percent.

B) increase quantity demanded by 0.5 percent.

C) decrease quantity demanded by 5 percent.

D) Decrease quantity demanded by 0.5 percent.

Answer: A

Review Question

The demand elasticity turns out to be ______when the product price comes down by 10% and the demand for the product goes up by 30%.

1. 3
2. 30
3. 13
4. 10

Answer: 3