

# Law of demand

## Key points

- The **law of demand** states that a higher price leads to a lower quantity demanded and that a lower price leads to a higher quantity demanded.
- **Demand curves** and **demand schedules** are tools used to summarize the relationship between demand and price.

## Demand for goods and services

Economists use the term **demand** to refer to the amount of some good or service consumers are willing and able to purchase at each price. Demand is based on needs and wants—a consumer may be able to differentiate between a need and a want, but from an economist’s perspective they are the same thing. Demand is also based on ability to pay. If you cannot pay, you have no effective demand.

What a buyer pays for a unit of the specific good or service is called **price**. The total number of units purchased at that price is called the **quantity demanded**. A rise in price of a good or service almost always decreases the quantity demanded of that good or service. Conversely, a fall in price will increase the quantity demanded. When the price of a gallon of gasoline goes up, for example, people look for ways to reduce their consumption by combining several errands, commuting by carpool or mass transit, or taking weekend or vacation trips closer to home. Economists call this inverse relationship between price and quantity demanded the *law of demand*. The law of demand assumes that all other variables that affect demand are held constant.

## Demand schedule and demand curve

- A *demand schedule* is a table that shows the quantity demanded at each price.
- A *demand curve* is a graph that shows the quantity demanded at each price.

Here's an example of a demand schedule from the market for gasoline.

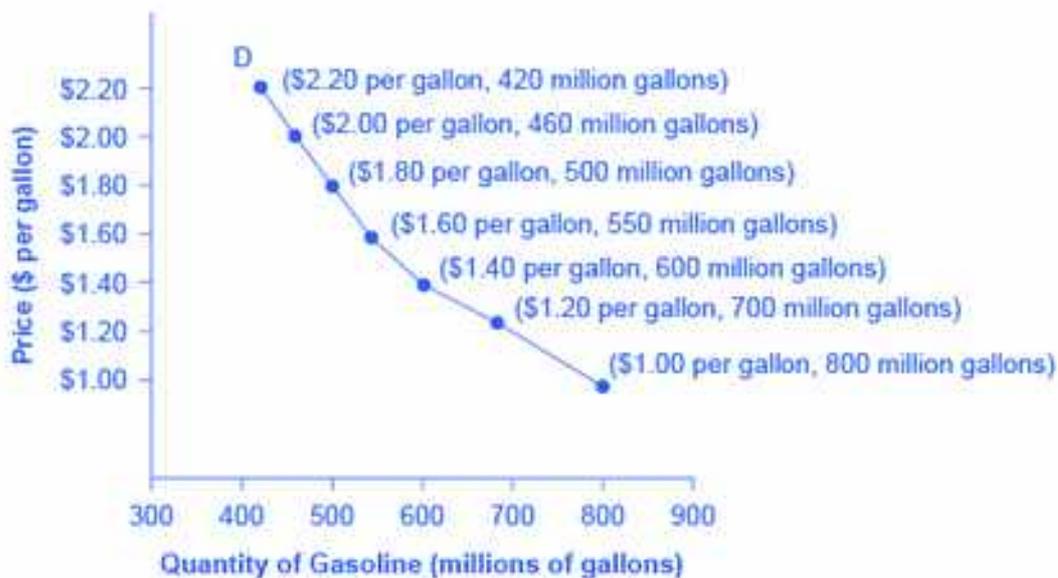
Price (per gallon)	Quantity demanded (millions of gallons)
\$1.00	800
\$1.20	700
\$1.40	600
\$1.60	550
\$1.80	500
\$2.00	460
\$2.20	420

Price, in this case, is measured in dollars per gallon of gasoline. The quantity demanded is measured in millions of gallons over some time period—for example, per day or per year—and over some geographic area—like a state or a country.

Here's the same information shown as a demand curve with quantity on the horizontal axis and the price per gallon on the vertical axis. Note that this is an exception to the normal rule in mathematics that the independent variable ( $x$ ) goes on the horizontal axis and the dependent variable ( $y$ ) goes on the vertical.

### A Demand Curve for Gasoline

n	n
t	t
,	,
0	2
0	0



The graph shows a downward-sloping demand curve that represents the law of demand. The demand schedule shows that as price rises, quantity demanded decreases, and vice versa. These points are then graphed, and the line connecting them is the demand curve. The downward slope of the demand curve again illustrates the law of demand—the inverse relationship between prices and quantity demanded.

Demand curves will be somewhat different for each product. They may appear relatively steep or flat, and they may be straight or curved. Nearly all demand curves share the fundamental similarity that they slope down from left to right, embodying the law of demand: As the price increases, the quantity demanded decreases, and, conversely, as the price decreases, the quantity demanded increases.

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## The difference between demand and quantity demanded

In economic terminology, demand is not the same as quantity demanded. When economists talk about demand, they mean the relationship between a range of prices and the quantities demanded at those prices, as illustrated by a demand curve or a demand schedule. When economists talk about quantity demanded, they mean only a certain point on the demand curve or one quantity on the demand schedule. In short, demand refers to the curve, and quantity demanded refers to a specific point on the curve.