LEARN

What is a Demand Curve?- A demand curve shows the relationship between the price of a good or service and the quantity of that good or service that consumers are willing and able to buy, in a period of time. *Example: A monthly demand for energy drinks*

The table below shows the quantity of canned energy drinks that consumers would purchase from a grocery store in a month, at several different prices.

TABLE A

Price of Energy Drinks ($/can)	Quantity of Cans Demanded (cans per month)
$1	1000
$2	900
$3	800
$4	700
$5	600
$6	500

Instructions: Plot these points in the graph below to create the demand curve for energy drinks. Be sure to clearly label the demand curve with a "D" or "Demand".

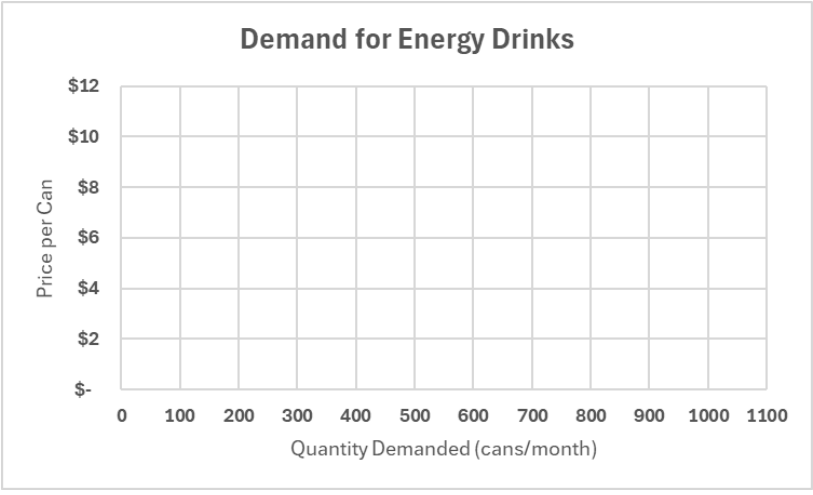
Note: In economics, graphs are used to show relationships (often called "curves") between two variables, even if the lines are straight. A demand curve places quantity on the horizontal axis and price on the vertical axis. In the example below, the horizontal axis shows the number of energy drinks demanded, while the vertical axis shows the price per can.

As you draw your demand curve, you'll notice it slopes downward. With few exceptions, demand curves take this shape because they reflect the **Law of Demand**: when the price of a good falls, the quantity demanded rises, holding other factors constant. For example, on the hypothetical demand curve for energy drinks, a $1 decrease in price leads to 100 more cans demanded each month.

1. What is the quantity of energy drinks demanded when the price is $2 per can?

2. If 500 cans of energy drinks are being demanded, what price is being paid?

3. Predict how many energy drinks would be demanded if the price was $7 per can?



4. Can you think of other factors, besides the price per can, that might affect how many cans of energy drinks consumers are willing and able to buy?

A New Demand Curve for Energy Drinks – Suppose the price of carbonated soft drinks (e.g., Coke, Pepsi, Mountain Dew) falls. Economic analysis shows that this changes the demand for energy drinks. Table B presents the new quantities of energy drinks demanded at the same range of prices.

TABLE B	
Price of Energy Drinks ($/can)	**Quantity of Cans Demanded (cans per month)**
$1	900
$2	800
$3	700
$4	600
$5	500
$6	400

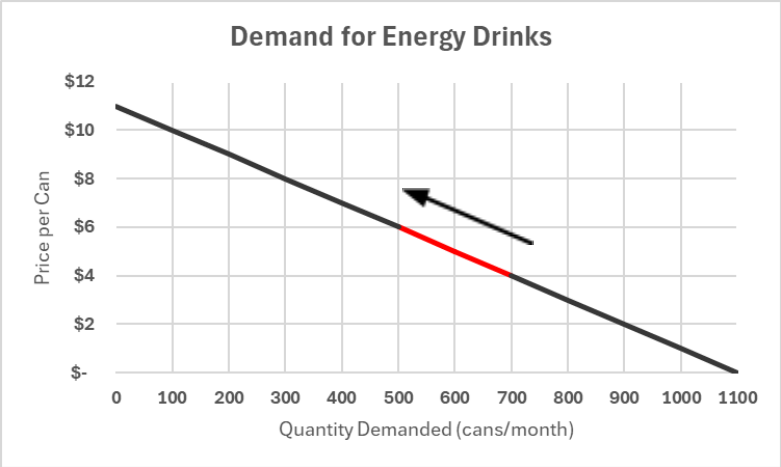
Instructions: Plot these points in the same graph as your first demand curve but label the new curve "D2".

You can see from your graph that the second demand curve lies to the left of the first. This leftward shift of the demand curve is also called a "decrease in demand". The quantity of energy drinks demanded is lower than before *at all prices*.

Question to Consider: Why would a change in the price of carbonated soft drinks cause a change in the consumer demand for energy drinks?

Determinants of Demand: As the previous example shows, demand for a product like energy drinks depends on more than just its price. These other influences are called *determinants of demand*. When a determinant changes, the entire demand curve shifts left or right.

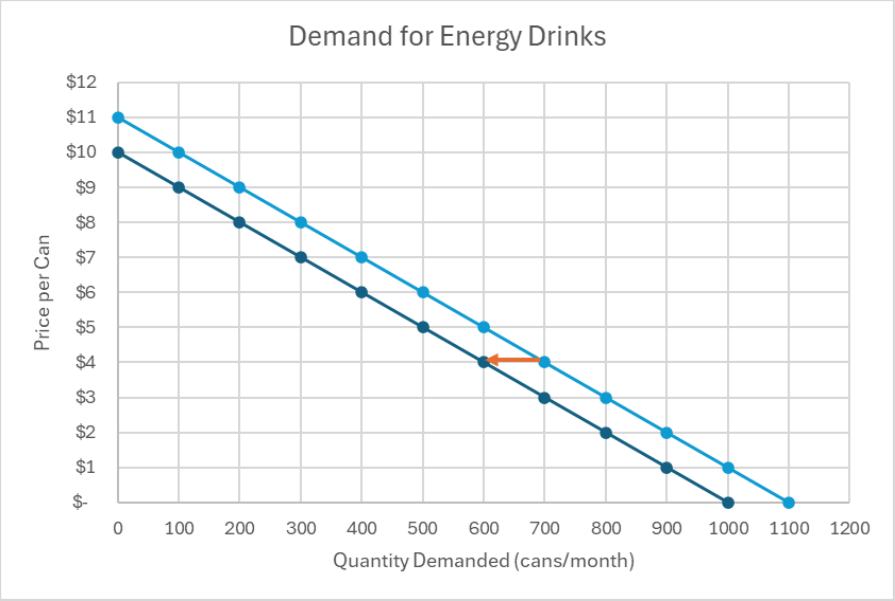
Important!- *Before we go further, note the graph below. When the price of energy drinks increased from $4 to $6 per can, the quantity of energy drinks demanded decreased from 700 to 500 cans. We see this as a movement along the demand curve and we describe it as a* ***decrease in the quantity demanded***.



Now look at the "Demand for Energy Drinks" graph below. At the $4 price, consumers are now only willing to buy 600 cans on the new demand curve.

This decrease in demand wasn't caused by a higher price of energy drinks, it was caused by an external change, the lower price of carbonated soft drinks.

We see this as a movement of the entire demand curve, and refer to it as a ***change in demand***.



Learning Your Demand Determinants

Some students find memory devices, or mnemonics, to be useful in remembering the important demand determinants.

Try this one: **INSECTS**

Income: for most goods (normal goods), when income rises, demand rises (shifts to the right). However, for some goods (inferior goods), when income rises, demand falls (shifts to the left). Energy drinks and other beverages are probably normal goods.

Number of consumers: when more consumers exist, there is greater demand for the good or service. More energy drinks will be demanded in larger towns with more people.

Substitutes: when the price of a substitute good rises, demand for the other good rises. In the above example, carbonated soft drinks are probably substitutes for energy drinks, so lower soft drink prices would create the decrease in demand seen in the graph.

Expectations: if consumers expect the price of a good to rise in the future, demand increases now. If consumers expect the price of energy drinks to rise next week, demand for energy drinks will rise now.

Complements: when the price of a complementary good rises, demand for the other good falls. If a complementary good for energy drinks rises, demand for energy drinks falls.

Tastes and preferences: when consumer tastes for a product get stronger, demand for the product rises. If advertising persuades consumers that energy drinks are tasty and beneficial, more consumers will demand them, shifting the demand to the right.

Subsidies or Taxes: a subsidy from the government works like a cash voucher that can be used to help pay for a good, increasing the demand. A tax works in the opposite direction, making a good more costly to consume, decreasing the demand for it.

PRACTICE

Instructions- *For each of the following situations, consider the demand for 1-pound blocks of cheddar cheese.*

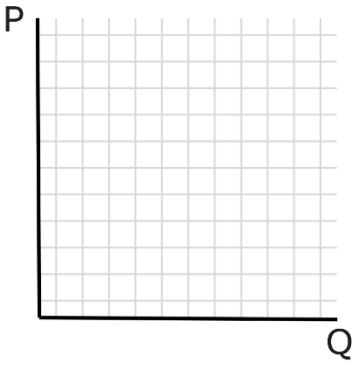
A. Would the situation cause the demand for cheddar to increase or decrease? Or would it cause an increase or a decrease in the quantity of cheddar demanded?
B. If the demand curve is shifting, which of the demand determinants was the most likely cause of that shift?
C. In the blank graph provided, draw a demand curve(s) that accurately reflects the situation.

1. While shopping for cheese, you notice that the price of Swiss cheese has decreased.

A. Decide if the situation changes the demand for cheddar or just the quantity demanded.

B. If the demand curve shifts, identify the determinant of demand causing the shift:

C. On the blank graph, draw the demand curve(s) to show the change.

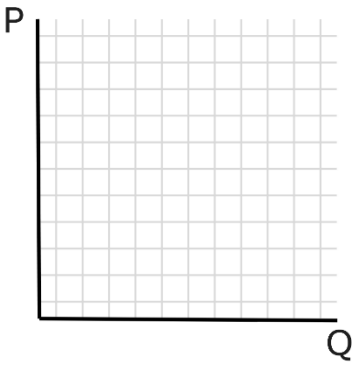


2. A popular podcaster broadcasts that the scientific community reports that eating cheddar cheese contributes to higher levels of intelligence and attractiveness to others.

A. Decide if the situation changes the demand for cheddar or just the quantity demanded.

B. If the demand curve shifts, identify the determinant of demand causing the shift:

C. On the blank graph, draw the demand curve(s) to show the change.

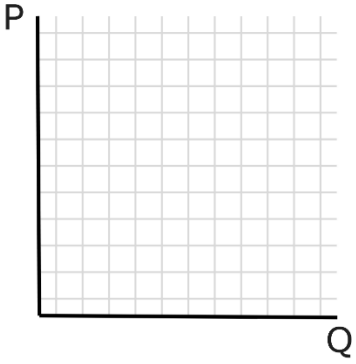


3. You also notice that the price of crackers has decreased.

A. Decide if the situation changes the demand for cheddar or just the quantity demanded.

B. If the demand curve shifts, identify the determinant of demand causing the shift:

C. On the blank graph, draw the demand curve(s) to show the change.

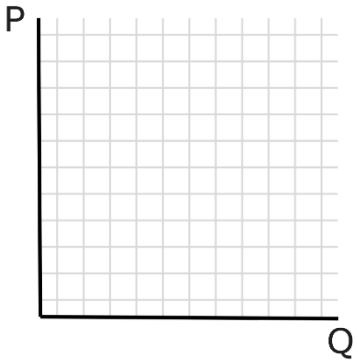


4. The price of cheddar cheese has increased.

A. Decide if the situation changes the demand for cheddar or just the quantity demanded.

B. If the demand curve shifts, identify the determinant of demand causing the shift:

C. On the blank graph, draw the demand curve(s) to show the change.

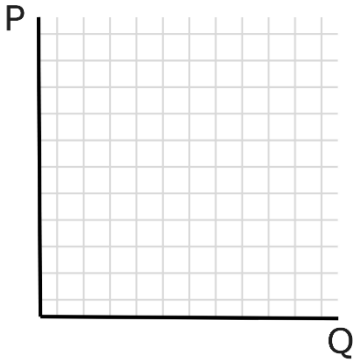


5. Government economists report that average household income is rising.

A. Decide if the situation changes the demand for cheddar or just the quantity demanded.

B. If the demand curve shifts, identify the determinant of demand causing the shift:

C. On the blank graph, draw the demand curve(s) to show the change.

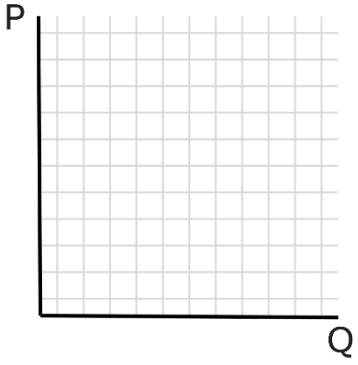


6. Consumers expect the price of cheddar cheese to significantly decrease next month.

A. Decide if the situation changes the demand for cheddar or just the quantity demanded.

B. If the demand curve shifts, identify the determinant of demand causing the shift:

C. On the blank graph, draw the demand curve(s) to show the change.



PROVE - ADVANCED PRACTICE QUESTIONS

1. All else equal, which of the following would most likely cause a decrease in the quantity of Netflix subscriptions demanded in a given month?

A. An increase in the price of Hulu subscriptions.
B. An increase in average household income.
C. An increase in the price of a Netflix subscription.
D. An increase in the popularity of Netflix streaming services.
E. A decrease in the price of televisions.

2. If electric vehicle consumers receive a subsidy from the government, we expect:
   A. A rightward shift of the demand curve.
   B. No change in the demand curve.
   C. An increase in the quantity demanded along the curve.
   D. A leftward shift of the demand curve.
   E. A decrease in the quantity demanded along the curve.

3. If goods A and B are complements, an increase in the price of good A would cause:
   A. A decrease in the quantity of good A demanded and an increase in the demand for good
   B. A decrease in the quantity of good A demanded and a decrease in the demand for good
   C. An increase in the quantity of good A demanded and a decrease in the demand for good
   D. A decrease in the quantity of good A demanded and no change in the demand for good
   E. A decrease in the quantity of good A demanded and an increase in the quantity of good demanded.

4. Which of the following best describes the law of demand?
   A. When the price of pizza falls, the demand for tacos decreases.
   B. When the price of gasoline increases, the demand for electric vehicles increases.
   C. When household incomes fall, the demand for new homes decreases.
   D. When the price of textbooks rises, students buy fewer textbooks.
   E. When a new Avengers movie comes to theatres, more tickets are purchased.

5. Which of the following would most likely increase the demand for canned dog food?
   A. The price of canned dog food falls.
   B. The population of domestic dogs is rising.
   C. Respected veterinarians warn the public that canned dog food is not healthy for dogs.
   D. The government subsidizes the adoption of domestic cats, but not dogs.
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6. Consumers expect a blizzard in two days and believe that the price of snow shovels will soon rise. How will this affect the current demand curve for snow shovels?
   A. No change in the current demand curve.
   B. The current demand curve shifts to the left.
   C. The current quantity demanded decreases along the demand curve.
   D. The current quantity demanded increases along the demand curve.
   E. The current demand curve increases.

7. Which of the following is most likely to cause the demand for ears of corn to increase?
   A. The price of tomatoes, a consumer substitute good, decreases.
   B. The price of butter, a consumer complementary good, increases.
   C. Government offers a subsidy to consumers of corn.
   D. Household incomes fall and corn is a normal good.
   E. Consumers believe that future corn prices are going to be lower than current prices.

8. Economists tell us that consumers are buying fewer tickets to professional baseball games. What could explain this?
   A. Professional baseball has become more popular.
   B. Baseball teams have lowered the price of parking on game day to zero.
   C. Average income has increased, and baseball tickets are normal goods.
   D. The price of alternative entertainment options has increased.
   E. Average ticket prices for baseball games has risen.

9. The law of demand states that, all else equal:
   A. As price decreases, quantity demanded increases.
   B. As income increases, demand increases.
   C. As tastes and preferences increase, demand increases.
   D. As the price of a substitute increases, demand increases.
   E. As the price of a complement increases, demand decreases.

10. The government is considering a tax on every sugary soda purchased. Would this affect the demand for sugary sodas in the short run?
   A. No, there would be no change.
   B. Yes, the demand would increase.
   C. Yes, the quantity of sugary sodas demanded would increase.
   D. Yes, the demand would shift to the left.
   E. No, but the supply curve would shift to the right.

WONDER

Read *The Rise of Influencer Trust independently. Then, respond to the following three questions. Be prepared to discuss your answers with a partner and the whole class in order to be exposed to a variety of perspectives.*

1. The article suggests that, at least for some consumers, social media influencers are trusted more than traditional experts in government or academia. In your experience, do you find this to be true? Find quotations from the article that support or rebut your personal experience.

2. How does a popular influencer affect the demand for goods and services? Provide an example, either from the article or from your experience. Draw a graph of a demand curve before and after the impact of an influencer's impact on that demand curve.

3. Suppose a successful influencer creates strong brand loyalty for one specific product. This loyalty is so strong that consumers become willing to pay much higher prices for that product. How would this affect the steepness or flatness of the demand curve for that product? Try drawing multiple demand curves that might reflect a situation in which consumers are so brand loyal that higher prices do not significantly reduce the popularity of the product.

Teacher Guide

LEARN

What is a Demand Curve?- A demand curve shows the relationship between the price of a good or service and the quantity of that good or service that consumers are willing and able to buy, in a period of time. *Example: A monthly demand for energy drinks*

The table below shows the quantity of canned energy drinks that consumers would purchase from a grocery store in a month, at several different prices.

TABLE A

Price of Energy Drinks ($/can)	Quantity of Cans Demanded (cans per month)
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Instructions: Plot these points in the graph below to create the demand curve for energy drinks. Be sure to clearly label the demand curve with a "D" or "Demand".

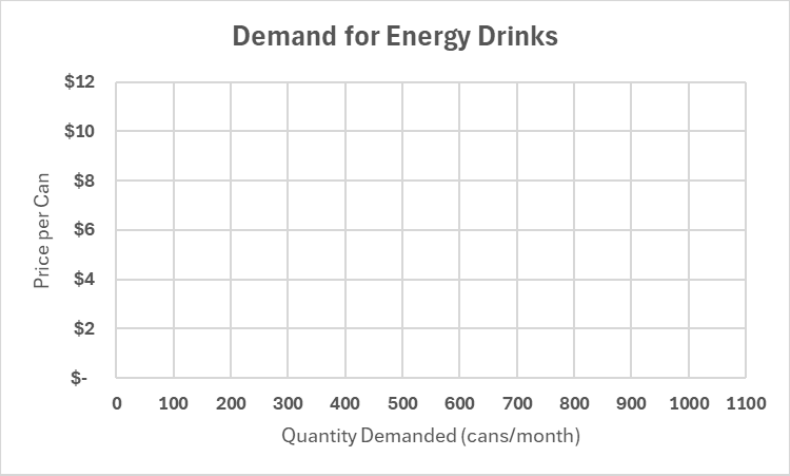
Note: In economics, graphs are used to show relationships (often called "curves") between two variables, even if the lines are straight. A demand curve places quantity on the horizontal axis and price on the vertical axis. In the example below, the horizontal axis shows the number of energy drinks demanded, while the vertical axis shows the price per can.

As you draw your demand curve, you'll notice it slopes downward. With few exceptions, demand curves take this shape because they reflect the **Law of Demand**: when the price of a good falls, the quantity demanded rises, holding other factors constant. For example, on the hypothetical demand curve for energy drinks, a $1 decrease in price leads to 100 more cans demanded each month.

1. What is the quantity of energy drinks demanded when the price is $2 per can?
   900 cans per month.

2. If 500 cans of energy drinks are being demanded, what price is being paid?
   $6 per can.

3. Predict how many energy drinks would be demanded if the price was $7 per can?
   Based on the pattern, the quantity demanded would likely fall to about 400 cans per month.



4. Can you think of other factors, besides the price per can, that might affect how many cans of energy drinks consumers are willing and able to buy?

Yes. Examples include:

- **Consumer income**
  Prices of substitutes (like soft drinks or coffee)
- **Prices of complements (like snacks bought with energy drinks)**
- **Consumer tastes and preferences**
- **Advertising or health information**
  Seasonal changes (e.g., exam season or sports events)

A New Demand Curve for Energy Drinks – Suppose the price of carbonated soft drinks (e.g., Coke, Pepsi, Mountain Dew) falls. Economic analysis shows that this changes the demand for energy drinks. Table B presents the new quantities of energy drinks demanded at the same range of prices.

TABLE B	
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Instructions: Plot these points in the same graph as your first demand curve but label the new curve "D2".

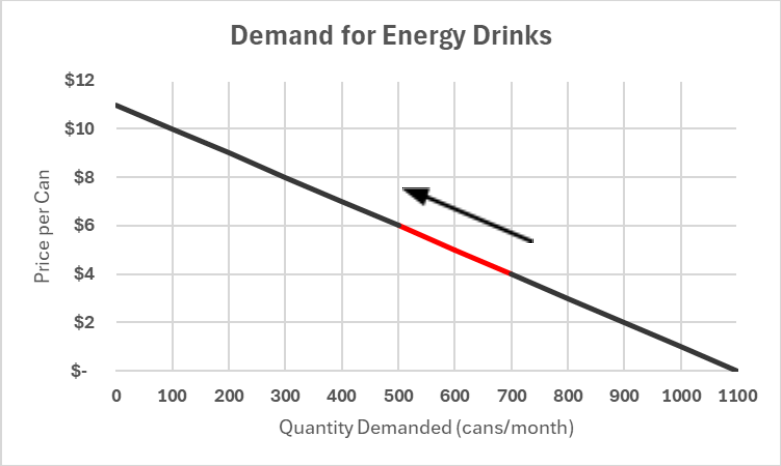
You can see from your graph that the second demand curve lies to the left of the first. This leftward shift of the demand curve is also called a "decrease in demand". The quantity of energy drinks demanded is lower than before *at all prices*.

Question to Consider: Why would a change in the price of carbonated soft drinks cause a change in the consumer demand for energy drinks?

Suggested Answer: A lower price for carbonated soft drinks makes them a more attractive substitute for energy drinks. Since many consumers view soft drinks and energy drinks as alternatives, some switch from buying energy drinks to buying cheaper sodas. This substitution effect causes the demand for energy drinks to decrease at all price levels.

Determinants of Demand: As the previous example shows, demand for a product like energy drinks depends on more than just its price. These other influences are called *determinants of demand*. When a determinant changes, the entire demand curve shifts left or right.

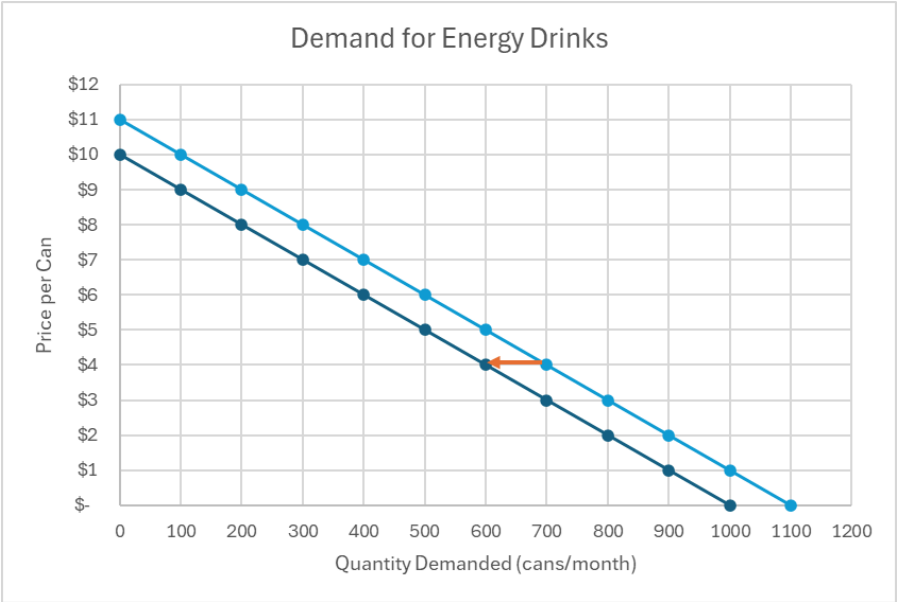
Important!- *Before we go further, note the graph below. When the price of energy drinks increased from $4 to $6 per can, the quantity of energy drinks demanded decreased from 700 to 500 cans. We see this as a movement along the demand curve and we describe it as a* ***decrease in the quantity demanded***.



Now look at the "Demand for Energy Drinks" graph below. At the $4 price, consumers are now only willing to buy 600 cans on the new demand curve.

This decrease in demand wasn't caused by a higher price of energy drinks, it was caused by an external change, the lower price of carbonated soft drinks.

We see this as a movement of the entire demand curve, and refer to it as a ***change in demand***.



Learning Your Demand Determinants

Some students find memory devices, or mnemonics, to be useful in remembering the important demand determinants.

Try this one: **INSECTS**

Income: for most goods (normal goods), when income rises, demand rises (shifts to the right). However, for some goods (inferior goods), when income rises, demand falls (shifts to the left). Energy drinks and other beverages are probably normal goods.

Number of consumers: when more consumers exist, there is greater demand for the good or service. More energy drinks will be demanded in larger towns with more people.

Substitutes: when the price of a substitute good rises, demand for the other good rises. In the above example, carbonated soft drinks are probably substitutes for energy drinks, so lower soft drink prices would create the decrease in demand seen in the graph.

Expectations: if consumers expect the price of a good to rise in the future, demand increases now. If consumers expect the price of energy drinks to rise next week, demand for energy drinks will rise now.

Complements: when the price of a complementary good rises, demand for the other good falls. If a complementary good for energy drinks rises, demand for energy drinks falls.

Tastes and preferences: when consumer tastes for a product get stronger, demand for the product rises. If advertising persuades consumers that energy drinks are tasty and beneficial, more consumers will demand them, shifting the demand to the right.

Subsidies or Taxes: a subsidy from the government works like a cash voucher that can be used to help pay for a good, increasing the demand. A tax works in the opposite direction, making a good more costly to consume, decreasing the demand for it.

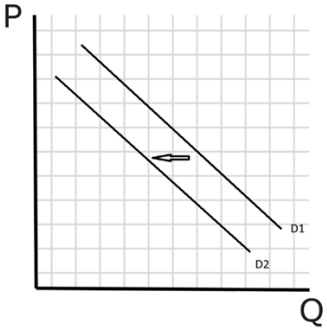
PRACTICE

Instructions- *For each of the following situations, consider the demand for 1-pound blocks of cheddar cheese.*

A. **Would the situation cause the demand for cheddar to increase or decrease? Or would it cause an increase or a decrease in the quantity of cheddar demanded?**
B. **If the demand curve is shifting, which of the demand determinants was the most likely cause of that shift?**
C. **In the blank graph provided, draw a demand curve(s) that accurately reflects the situation.**

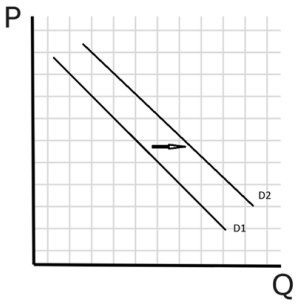
1. While shopping for cheese, you notice that the price of Swiss cheese has decreased.

Suggested Answer: *Assuming Swiss cheese is a substitute good, a lower price of Swiss reduces the demand for cheddar cheese, shifting the demand curve to the left.*



2. A popular podcaster broadcasts that the scientific community reports that eating cheddar cheese contributes to higher levels of intelligence and attractiveness to others.

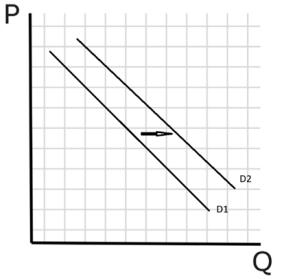
Suggested Answer: *A public figure can cause consumer tastes and preferences to get stronger, increasing demand for cheddar, shifting the curve to the right.*



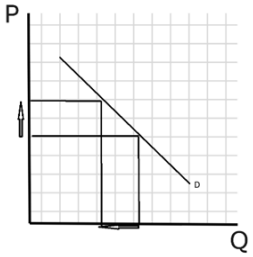
3. You also notice that the price of crackers has decreased.

Suggested Answer: *Assuming that crackers are a complementary good with cheddar cheese, a lower price should increase demand for cheddar, shifting the curve to the right.*

4. The price of cheddar cheese has increased.

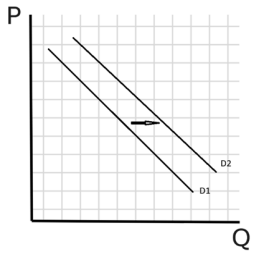


Suggested Answer: *A higher price of cheddar causes the quantity of cheddar demanded to decrease, which we see as an upward movement along the same demand curve.*



5. Government economists report that average household income is rising.

Suggested Answer: *Assuming cheddar cheese is a normal good, higher incomes should increase the demand for cheddar cheese, shifting the curve to the right.*



6. Consumers expect the price of cheddar cheese to significantly decrease next month.

Suggested Answer: *The future expectation of lower prices should decrease the current demand for cheddar, shifting the curve to the left.*

PROVE - ADVANCED PRACTICE QUESTIONS

1. All else equal, which of the following would most likely cause a decrease in the quantity of Netflix subscriptions demanded in a given month?
A. An increase in the price of Hulu subscriptions.
B. An increase in average household income.
C. An increase in the price of a Netflix subscription.
D. An increase in the popularity of Netflix streaming services.
E. A decrease in the price of televisions.
A higher price of Netflix subscriptions would cause a decrease in the quantity demanded. All other choices should cause the demand curve for Netflix to shift to the right.

2. If electric vehicle consumers receive a subsidy from the government, we expect:
A. A rightward shift of the demand curve.
B. No change in the demand curve.
C. An increase in the quantity demanded along the curve.
D. A leftward shift of the demand curve.
E. A decrease in the quantity demanded along the curve.
When a subsidy is provided for consuming a good or service, the demand curve shifts to the right. The subsidy acts as an increase to consumer income, but it can only be applied to the specific good or service, not all goods.

3. If goods A and B are complements, an increase in the price of good A would cause:
A. A decrease in the quantity of good A demanded and an increase in the demand for good
B. A decrease in the quantity of good A demanded and a decrease in the demand for good B.
C. An increase in the quantity of good A demanded and a decrease in the demand for good
D. A decrease in the quantity of good A demanded and no change in the demand for good

E. A decrease in the quantity of good A demanded and an increase in the quantity of good demanded.
The increase in the price of good A causes a decrease in quantity demanded along the demand curve for A. Since good B is complementary, the higher price of A causes the demand for B to decrease.

4. Which of the following best describes the law of demand?
A. When the price of pizza falls, the demand for tacos decreases.
B. When the price of gasoline increases, the demand for electric vehicles increases.
C. When household incomes fall, the demand for new homes decreases.
D. When the price of textbooks rises, students buy fewer textbooks.
E. When a new Avengers movie comes to theatres, more tickets are purchased.
The law of demand describes how, all else held constant, higher prices cause consumers to reduce their consumption of a product.

5. Which of the following would most likely increase the demand for canned dog food?
A. The price of canned dog food falls.
B. The population of domestic dogs is rising.
C. Respected veterinarians warn the public that canned dog food is not healthy for dogs.
D. The government subsidizes the adoption of domestic cats, but not dogs.
E. The price of adopting dogs from the animal shelter is rising.
More domestic dogs, and more human dog owners, means there are more consumers seeking to purchase dog food and the demand curve shifts rightward.

6. Consumers expect a blizzard in two days and believe that the price of snow shovels will soon rise. How will this affect the current demand curve for snow shovels?
A. No change in the current demand curve.
B. The current demand curve shifts to the left.
C. The current quantity demanded decreases along the demand curve.
D. The current quantity demanded increases along the demand curve.
E. The current demand curve increases.
When consumers expect the price to rise in the future, demand increases now. Consumers wish to acquire the snow shovels now, before the price increases.

7. Which of the following is most likely to cause the demand for ears of corn to increase?
A. The price of tomatoes, a consumer substitute good, decreases.
B. The price of butter, a consumer complementary good, increases.
C. Government offers a subsidy to consumers of corn.
D. Household incomes fall and corn is a normal good.
E. Consumers believe that future corn prices are going to be lower than current prices.
The subsidy provides an incentive for consumers to purchase corn, increasing the demand for corn.

8. Economists tell us that consumers are buying fewer tickets to professional baseball games. What could explain this?
A. Professional baseball has become more popular.
B. Baseball teams have lowered the price of parking on game day to zero.
C. Average income has increased, and baseball tickets are normal goods.
D. The price of alternative entertainment options has increased.
E. Average ticket prices for baseball games has risen.
This is the only choice that would explain fewer baseball tickets are being purchased.

9. The law of demand states that, all else equal:

A. As price decreases, quantity demanded increases.
B. As income increases, demand increases.
C. As tastes and preferences increase, demand increases.
D. As the price of a substitute increases, demand increases.
E. As the price of a complement increases, demand decreases.
This choice reflects the law of demand.

10. The government is considering a tax on every sugary soda purchased. Would this affect the demand for sugary sodas in the short run?
A. No, there would be no change.
B. Yes, the demand would increase.
C. Yes, the quantity of sugary sodas demanded would increase.
D. Yes, the demand would shift to the left.
E. No, but the supply curve would shift to the right.
A tax on consumption of a good or service creates an incentive to demand fewer units of that good, decreasing the demand for it.

WONDER

Read *The Rise of Influencer Trust independently. Then, respond to the following three questions. Be prepared to discuss your answers with a partner and the whole class in order to be exposed to a variety of perspectives.*

1. The article suggests that, at least for some consumers, social media influencers are trusted more than traditional experts in government or academia. In your experience, do you find this to be true? Find quotations from the article that support or rebut your personal experience.

Suggested Answer: Responses will be specific to the student's experience.

Yes, this often feels true. Many people, especially Millennials and Gen Z, see influencers as more accountable because their success depends directly on audience trust. As the article explains: "Influencers may not have degrees from Ivy League universities or government roles, but their influence is earned, not inherited. They survive by maintaining a direct relationship with their audiences. If they lie or disappoint, they lose followers." This contrasts with institutions that, according to the article, can "operate on assumed trust, not daily-earned accountability."

2. How does a popular influencer affect the demand for goods and services? Provide an example, either from the article or from your experience. Draw a graph of a demand curve before and after the impact of an influencer's impact on that demand curve.

Suggested Answer: If the influencer is popular, as described in the article, the demand for the products they endorse increases, shifting those demand curves to the right.

A popular influencer can increase demand for a good or service by promoting it to their large audience. When followers adopt their recommendation, the demand curve shifts to the right because more people are willing to buy at every price. For example, the article notes that "nearly 60% of ecommerce brands rely on influencers to drive sales and engagement." An everyday example might be when a beauty influencer promotes a skincare product—sales often surge as demand increases. On the graph, this would be shown as the demand curve moving rightward from D1 to D2.

3. Suppose a successful influencer creates strong brand loyalty for one specific product. This loyalty is so strong that consumers become willing to pay much higher prices for that product. How would this affect the steepness or flatness of the demand curve for that product? Try drawing multiple demand curves that might reflect a situation in which consumers are so brand loyal that higher prices do not significantly reduce the popularity of the product.

Suggested Answer: Stronger brand loyalty should do two things to the demand curve, shift it to the right and increase the steepness of the curve. As we will see in another exercise, a steeper demand curve means that higher prices will only slightly decrease the quantity demanded. In other words, consumers are not very responsive to those higher prices and many will continue to pay them.

If consumers are very brand loyal, the demand curve becomes steeper (more inelastic) because quantity demanded changes very little when the price rises. The stronger the loyalty, the less sensitive buyers are to price increases. For example, some influencers create cult-like followings for products, and fans will pay high prices to stay connected to the brand. On a graph, this would be shown with several possible demand curves that become increasingly steep, reflecting stronger loyalty and less responsiveness to price.