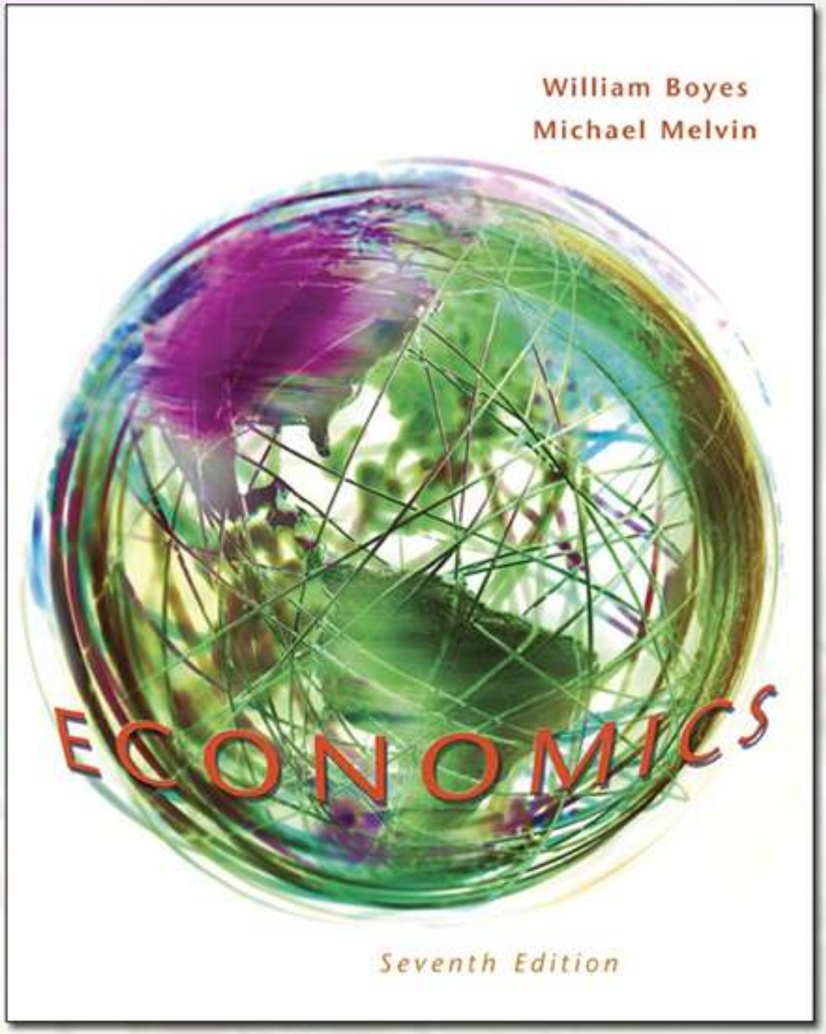

Chapter 20

Elasticity:

Demand and Supply

___________________are goods that have a negative cross-price elasticity of demand.

_Complements______are goods that have a negative cross-price elasticity of demand.

Boyes/Melvin Economics
Chapter 20

If the demand for corn is elastic then,

a) there are many substitutes for the consumption of corn.
b) the price elasticity of demand for corn is greater than one.
c) an increase in price will reduce total revenue for corn producers.
d) a decrease in price will increase total revenue for corn producers.
e) All of the above.

Boyes/Melvin Economics
Chapter 20

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e) All of the above. (correct)

When the price of X increases by 4%, the quantity demanded of Y decreases 2%. The cross price elasticity is_________and the goods are_____________.

When the price of X increases by 4%, the quantity demanded of Y decreases 2%. The cross price elasticity is -.5____and the goods are complements.

________________are goods that have a positive cross-price elasticity of demand.

Substitutes are goods that have a positive cross-price elasticity of demand.

Boyes/Melvin Economics
Chapter 20

Suppose 200 videotapes are rented when the price is $4. If the price drops by $0.80, the number of videotapes rented increases to 220. Which of the following statements about the price elasticity of demand is true?

a) The elasticity of demand is equal to 5.
b) The elasticity of demand is equal to .5.
c) The elasticity of demand is equal to .2.
d) Demand is unit-elastic.
e) The elasticity of demand is equal to 2.

Boyes/Melvin Economics
Chapter 20

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b) The elasticity of demand is equal to .5. (correct)
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e) The elasticity of demand is equal to 2.

If demand is unit elastic, a 20% increase in the price of good X will result in what?

A 20% decrease in the QD of good X.

Boyes/Melvin Economics
Chapter 20

For a downward-sloping straight–line demand curve, the top portion of the curve is generally

a) perfectly elastic.
b) elastic.
c) unit-elastic.
d) inelastic.
e) perfectly inelastic.

Boyes/Melvin Economics
Chapter 20

For a downward-sloping straight–line demand curve, the top portion of the curve is generally

a) perfectly elastic.
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Boyes/Melvin Economics
Chapter 20

A reason that economists use percentage changes to measure elasticity, rather than the slope of the demand curve, is that

a) the slope doesn't tell us whether a change is relatively large or small.
b) the slope is sensitive to the units used for measurement.
c) by looking at percentage changes we can compare the effects of price changes on different goods.
d) All of the above.
e) None of the above.

Boyes/Melvin Economics Chapter 20

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Boyes/Melvin Economics
Chapter 20

Suppose the price of a product is reduced from $10 to $6 and the quantity demanded increases from 40 to 60 units. From this we can conclude that the price elasticity of demand over this price range is equal to

a) 1.2.
b) 1.25.
c) 0.80.
d) 0.20.
e) Cannot be determined from the information given.

Boyes/Melvin Economics
Chapter 20

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Boyes/Melvin Economics
Chapter 20

Along a straight-line demand curve, total revenue reaches a maximum in the range where

a) demand is elastic.
b) demand is inelastic.
c) demand is unitary elastic.
d) supply is elastic.
e) supply is inelastic.

Boyes/Melvin Economics
Chapter 20

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d) supply is elastic.
e) supply is inelastic.

How does the availability of substitutes affect the elasticity of demand?

More subs available, more elastic.

Boyes/Melvin Economics
Chapter 20

Suppose a producer is able to recognize two different groups of customers, one having an elastic demand and the other having an inelastic demand. Price discrimination by the producer would most likely

a) involve decreasing the price for the inelastic group only.
b) involve decreasing the price for the elastic group only.
c) not occur because it is illegal.
d) involve increasing the price for both groups.
e) involve increasing the price for the elastic group only.

Boyes/Melvin Economics Chapter 20

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Boyes/Melvin Economics Chapter 20

Demand is more inelastic when

a) the demand curve is steeper.

b) the time period becomes shorter.

c) a good makes up a smaller percentage of a consumer's budget.

d) the number of available substitutes declines.

e) All of the above.

Boyes/Melvin Economics Chapter 20

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Boyes/Melvin Economics
Chapter 20

If a 10 percent increase in income results in a 50 percent decline in the quantity of potatoes purchased, other things being equal, then potatoes are a(n)

a) complement good.
b) substitute good.
c) inferior good.
d) normal good.
e) luxury good.

Boyes/Melvin Economics
Chapter 20

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If the price of good X increases by 10% and the QS of good X increases by 2%, what can we say about the elasticity of supply?

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Supply is inelastic

ACTIVE LEARNING **2**

Elasticity and expenditure/revenue

A. Pharmacies raise the price of insulin by 10%. Does total expenditure on insulin rise or fall?

ACTIVE LEARNING **2**

Answers

A. Pharmacies raise the price of insulin by 10%. Does total expenditure on insulin rise or fall?

Expenditure = ***P*** x ***Q***

Since demand is inelastic, ***Q*** will fall less than 10%, so expenditure rises.

ACTIVE LEARNING **2**

Elasticity and expenditure/revenue

B. As a result of a fare war, the price of a luxury cruise falls 20%.
Does luxury cruise companies' total revenue
rise or fall?

ACTIVE LEARNING **2**

Answers

B. As a result of a fare war, the price of a luxury cruise falls 20%.
Does luxury cruise companies' total revenue rise or fall?

Revenue = ***P*** x ***Q***

The fall in ***P*** reduces revenue,
but ***Q*** increases, which increases revenue.
Which effect is bigger?

Since demand is elastic, ***Q*** will increase more than 20%, so revenue rises.

Last year, Valerie purchased 20 pounds of chicken wings when her salary was \$20,000. This year she purchased 25 pounds of wings and her salary was \$30,000. What can we say about the type of good that wings are to Valerie?

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Normal Good

How does time impact elasticity of demand ?

The more time, the more elastic the demand.

If the manager lowers the price of a movie ticket by 10% and the price elasticity of demand is 4, what will be the percentage change in movie tickets demanded?

40% increase

4=Q/10

Q=40