How much would you pay for a cup of coffee?

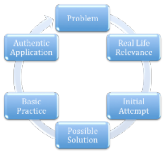
Mircoeconomics I

The Law of Supply and Demand

Mapping Demand | Demand Composition and Shocks | Supply and Equilibrium | Elasticity

The Law of Supply and Demand

What should you charge for a cup of coffee in order to maximize your revenue?



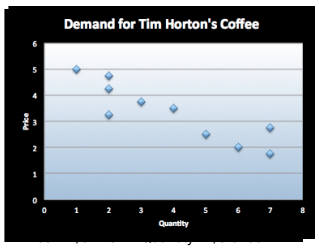
Initial Attempt

How do you figure this out?

The Law of Supply and Demand

Possible Solution

What should you charge for a cup of coffee in order to maximize your revenue?



What do you notice?
Why might this be?

Can we formulate a law for demand?

What can we do with this now?

In what way does this new knowledge begin to address these questions?

What to produce?

- What's worth producing?
- In what quantities?

How to produce?

- By whom, with what resources?
- How much labour, how much capital, by small or large facilities

For whom?

- How will output be shared?
- How will decisions about distribution be made?

Mircoeconomics I

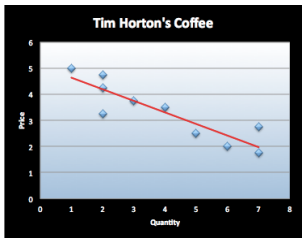
The Law of Supply and Demand

Mapping Demand | Demand Composition and Shocks | Supply and Equilibrium | Elasticity

The Law of Supply and Demand

Problem

Why is the demand line where it is, and can it move?



Initial Attempt

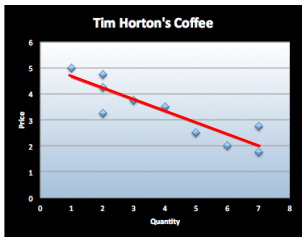
What made you select the price you did in the survey?

Brainstorm all the conditions that guided your decision (consciously or not).

The Law of Supply and Demand

Problem

Why is the demand line where it is, and can it move?



Possible Solution

Mircoeconomics I

The Law of Supply and Demand

Mapping Demand | Demand Composition and Shocks | Supply and Equilibrium | Elasticity

The Law of Supply and Demand

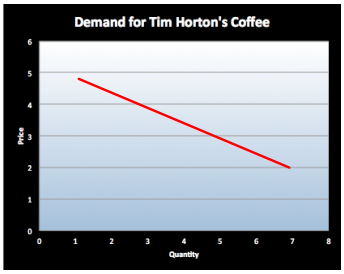
Problem

Real Life Relevance

You've learned to find where the maximum revenue for suppliers occurs. Does this mean they *will* sell this many cups of coffee and maximize revenue?

What must occur for this to happen?

does max revenue = max profit?



Initial Attempt

Can you compose a law for supply?

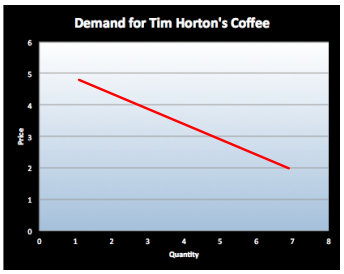
The Law of Supply and Demand

Problem

What types of things would influence a supplier's decision about the quantity to supply to the market?

Initial Attempt

Brainstorm and group ideas together

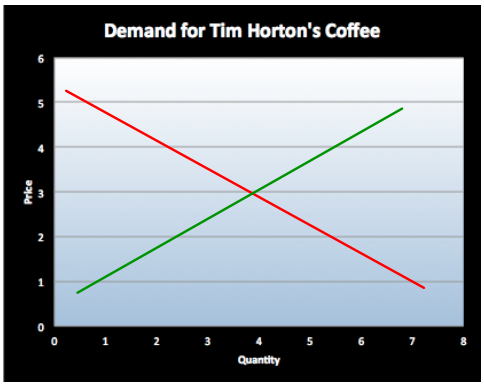


Possible Solution

The Law of Supply and Demand

Problem

How does the "market" decide what the Price and Quantity will be?



The Law of Supply and Demand

In Conclusion

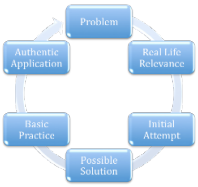
Disequalibrium to Equalibrium

Demand vs. Quantity Demanded
Supply Quantity Supplied

The Law of Demand

The Law of Supply

The Law of Price



Basic Practice

Questions 1, 2, & 3 on page 88.

Questions 1, 3, 7, 8 on page 92-93.

OPEC agrees to cut crude output

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Authentic Application

Explain using economic theory

LUKE PACHYMUTHU AND BARBARA LEWIS
Reuters
September 10, 2008 at 6:23 AM EDT

VIENNA — After hours of wrangling, OPEC on Wednesday agreed to revise its complex output targets and said the move would effectively cut supplies by half a million barrels per day (bpd).
Ministers of the Organization of the Petroleum Exporting Countries (OPEC) had been widely expected to stick to existing production allocations, which have been in place all year.
But some voiced concern about a growing surplus of oil on the market, and prices on Tuesday sank to a five-month low below $102 (U.S.) a barrel, around 30 per cent below a record hit in July above $147.
The producer group's output targets have long been opaque and analysts interpreted the decision as keeping existing allocations intact, while calling for tighter compliance.
"The communique is much as expected," said Paul Horsnell of Barclays Capital. "However, it also talks of strictly adhering to quotas, when we might have expected the trimming back in coming months to be done more discreetly."
Others agreed the surprise was that OPEC has made public its intention to remove supply above agreed limits.
"The statement is clear as mud, but really what it says is members should keep to quota, which basically means Saudi Arabia should stop the additional barrels that it has provided over the summer, which was somehow expected," said Olivier Jakob of Petromatrix. "I would say it's only half of a surprise because they have made a formal announcement."

Authentic Application Explain using economic theory

delicious

Speculators blamed for oil price spike

TORONTO STAR GRAPHIC
Institutional investors fingered as villains in new independent report

Sep 11, 2008 04:30 Am

Institutional investors caused the rapid rise and subsequent steep fall in oil prices in 2008, according to an independent report released by U.S. lawmakers yesterday.

The report, co-authored by hedge fund manager Michael Masters, said that from January to May index traders poured $60 billion (U.S.) into commodity markets, causing a big spike in oil prices.

When the U.S. Congress held hearings May to July about reining in speculation, traders pulled $39 billion from the market, the report stated. Masters said his company paid for the report to help lawmakers as they consider new regulations for futures markets. But critics note that Masters' hedge fund invests in the auto and airline industries, which would benefit from lower oil prices.

Oil hit a record $147 a barrel in July, then started falling sharply until it reached $102 this week.

Authentic Application Explain using economic theory

delicious

Copper steady, inventory rise weighs

Lead extends losses after biggest ever daily fall

LONDON — Reuters
Last updated on Friday, Sep. 11, 2009 06:57AM EDT

Copper (HG-FT288.150.500.17%) was steady after an uncertain start on Friday, vacillating between investors who fret prices have gone too high despite weak demand fundamentals, and a weak U.S. dollar which gives a boost to metal prices.

The price has been moving within a $500 (U.S.) range since the beginning of August as the market worries over uncertainties about the pace of the recovery and prices have become prone to a correction after more than doubling since the start of the year.

Mircoeconomics I

The Law of Supply and Demand

Mapping Demand | Demand Composition and Shocks | Supply and Equilibrium | Elasticity

Law of Supply and Demand

Elasticity

Elasticity is the responsiveness of demand (and supply) to a change in price.

Problem

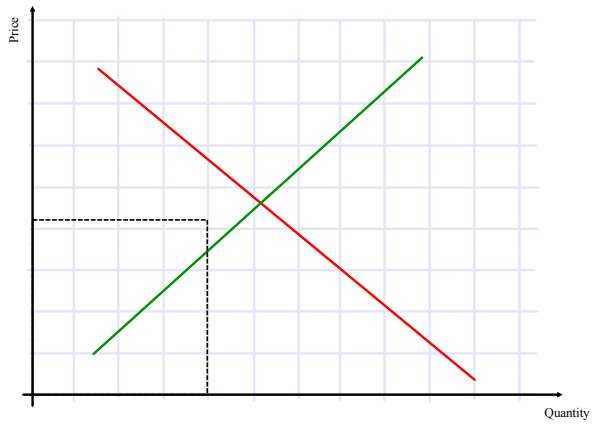
Would you expect a price increase of 10% to change the demand for T-shirts the same way it changes demand for gasoline?

What types of factors would change the rate of response of demand to price?

Real Life Relevance

It's useful for economists to understand elasticity, because it helps us determine the degree of impact any price change will have on the demand and supply of any good or service.

Elasticity Demand



Factors Affecting Demand Elasticity

Demand

Initial Attempt

Possible Solution

Elasticity

In addition to understanding elasticity, Economists can actually calculate it.

Formula:

Demand

$$E_d = \frac{\triangle Q_d}{\triangle P_d}$$

Meaning:

Example:

Elasticity Demand

In summary then...

	Q_d	P_d	Total Revenue
Before			
After			
$\%\triangle$			

Elasticity at Equilibrium is:

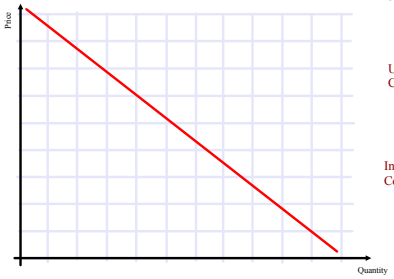
Elasticity Demand

Let's try another example...

	Q_d	P_d	Total Revenue
Before			
After			
%△			

Elasticity at this point is:

Types of Demand Elasticity



Type of Elasticity:	Demand:
Elastic Demand Coefficient $E_d < -1$	
Unitary Demand Coefficient $E_d = 1$	
Inelastic Demand Coefficient $E_d > -1$	

The slope of the supply curve is 5 and no one will supply the product when the price is $2. The slope of the demand curve is -2, and no one buys the product at $15.

1. Find the supply curve's equation.

2. Solve for the equilibrium point using the formulas for the demand and supply schedules.

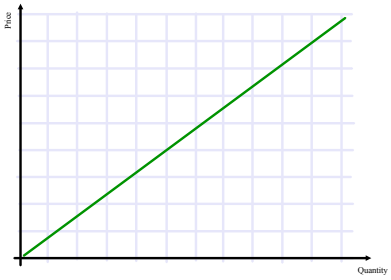
3. Find the elasticity coefficient of demand at the equilibrium point.

4. Find the elasticity coefficient of supply at the equilibrium point.

5. From the answers in 3 and 4, how would suppliers and consumers react to a $0.50 increase in price at equilibrium? Why?

Types of Supply Elasticity

What's different about the elasticity of supply? Why?



Type of Elasticity:	Supply:
Inelastic Supply Coefficient $E_s < 1$	
Unitary Supply Coefficient $E_s = 1$	
Elastic Supply Coefficient $E_s > 1$	

Elasticity

Formula:

Supply $$E_s = \frac{\triangle Q_s}{\triangle P_s}$$

Meaning:

Example: Let's use this example of T-Shirts

Price	Quantity Demanded	Quantity Supplied
$20	16	0
$24	12	4
$28	8	8
$32	4	12
$36	0	16

Factors Affecting Elasticity

Supply

Time to market

Ease of storage

Cost

Exercises

Check your understanding page 97, # 1 - 4

Application

delicious

elasticity

Match the Mover

	Demand	Supply
	Location	Location
	Elasticity	Elasticity

Mircoeconomics I

The Law of Supply and Demand

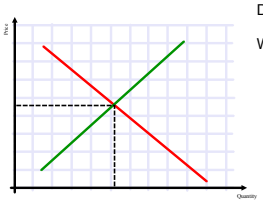
Utility | Applications of Supply and Demand

Utility Theory of Consumer Choice.

What does equilibrium really mean?

Who buys at the equilibrium market price?
Who doesn't?
Does everyone pay what they want?
Does anyone get a deal?

Who sells at the equilibrium market price?



Utility Theory of Consumer Choice.

To understand this story, we will follow the adventures of creepy Jeff Boulton.

The question is, if he can't have everything he wants, how does he decide?

So how do we apply the Theory of Utility?

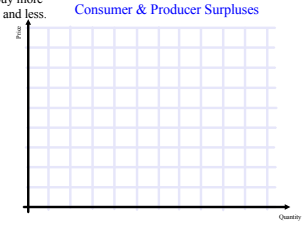
We'll discuss three ways:

1. It supports the structure of our demand curves
2. Consumer surpluses (& producer surplus)
3. Adam Smith's "Paradox of Value"

Demand Curves

If people get less glee from each item as they consume more and more of that item, then it makes sense that to buy more and more of an item, people are willing to pay less and less. That is why the demand curve's slope is negative.

Consumer & Producer Surpluses



Paradox of Value

Why are people willing to pay more for diamond's than for food?

Do: Exercises 1-3 on page 105

Mircoeconomics I

The Law of Supply and Demand

Utility | Applications of Supply and Demand

Authentic Economic Analysis

Assignment:

- Select groups of four max.
- You will be assigned two topics
- Analyze the effects of the interference using supply and demand graphs
- Individually, find a real-life example of ALL types of interference and tag it

delicious government_interference

Recall our assumptions when dealing with supply and demand graphs:

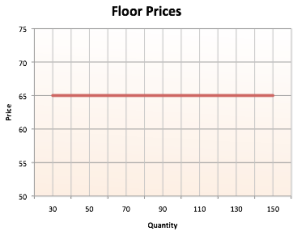
- Markets are free
- Markets are competitive
- Humans are rational
- Conditions can change over time

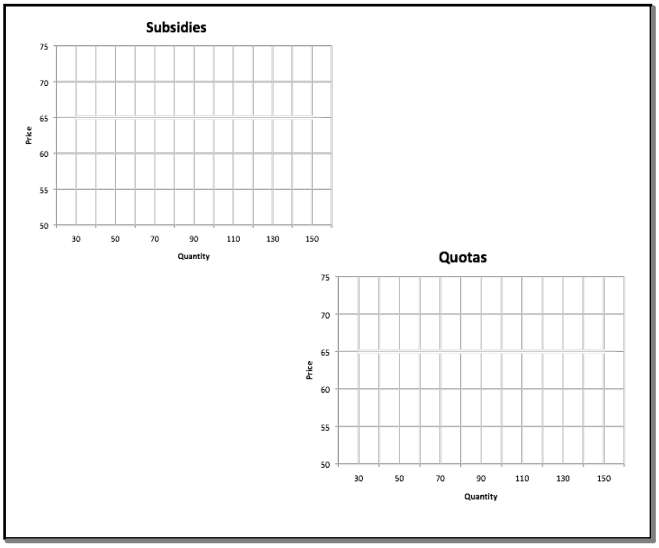
Topics (types of interference)

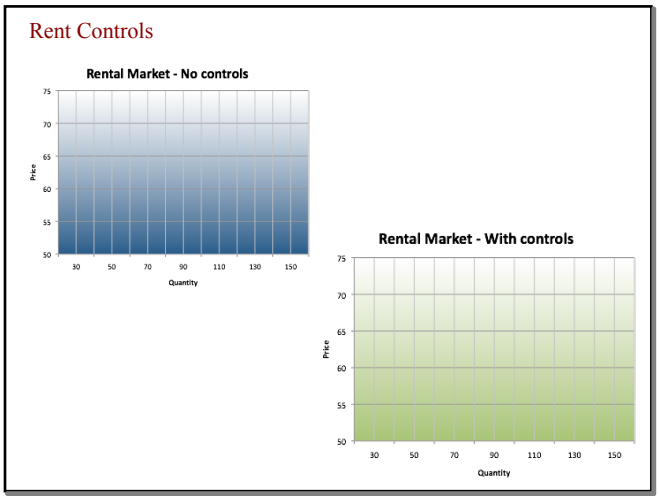
Minimum wage legislation
Rent control
Output quota
Value added tax
Subsidy

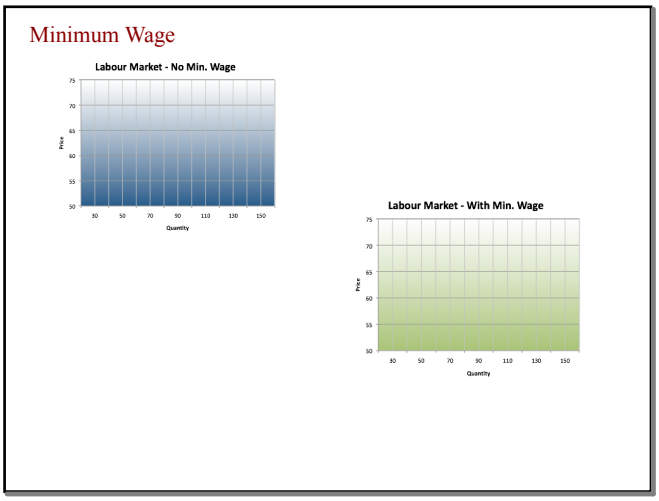
Ceiling Prices

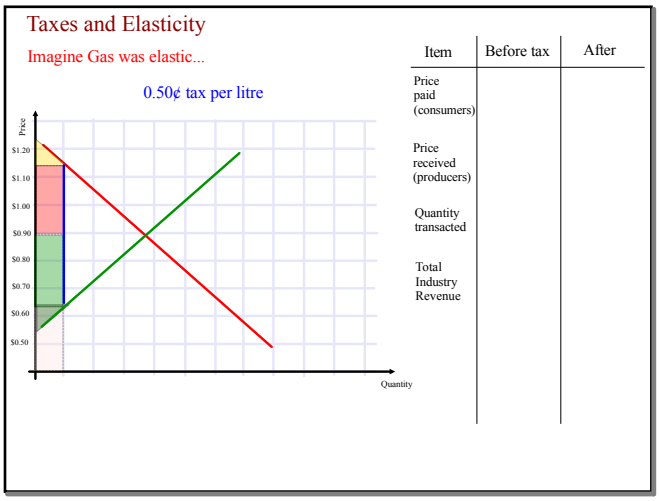
Floor Prices




Subsidies
Price
Quantity
Quotas
Price
Quantity


Rent Controls
Rental Market - No controls
Price
Quantity
Rental Market - With controls
Price
Quantity

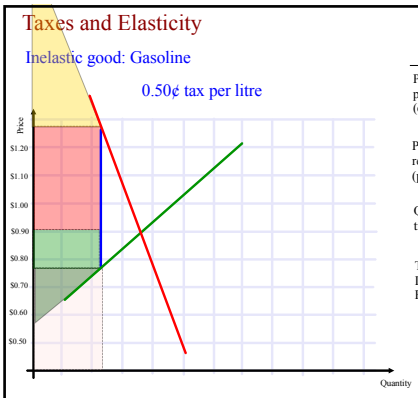

Minimum Wage
Labour Market - No Min. Wage
Labour Market - With Min. Wage


Taxes and Elasticity
Imagine Gas was elastic...
0.50¢ tax per litre
Price
$1.20
$1.10
$1.00
$0.90
$0.80
$0.70
$0.60
$0.50
Quantity
Item
Before tax
After
Price paid (consumers)
Price received (producers)
Quantity transacted
Total Industry Revenue

Taxes and Elasticity

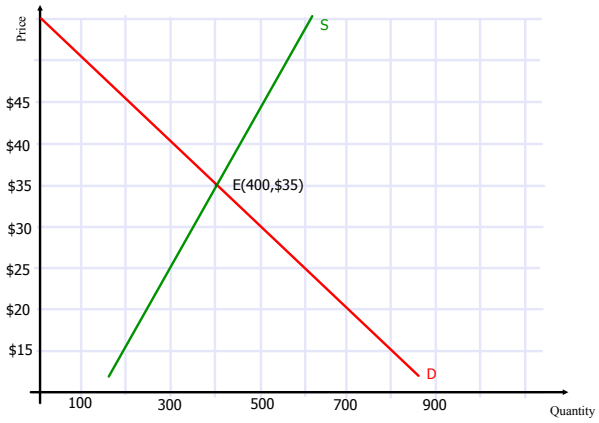
Inelastic good: Gasoline

0.50¢ tax per litre



Item	Before tax	After
Price paid (consumers)		
Price received (producers)		
Quantity transacted		
Total Industry Revenue		

Sales Tax Exercise



Calculate the following before AND after a sales tax of $15 per unit is imposed:

a) Industry sales
b) The value of the consumer surplus
c) The value of the producer surplus
d) Total tax revenue