

Macroeconomics and Microeconomics

Ultimate

Review Packet

Created by Jacob Clifford

Thank you for watching my YouTube videos and for supporting ACDC Econ by purchasing this review packet. Please keep in mind that the videos and packet are not designed to replace your teacher, professor, or textbook. That said, I guarantee that watching the videos and filling out this packet will improve your understanding of economics and your grade. As you go through each unit, make sure to pause the videos often and define the key terms, draw the graphs, and do the practice questions.

As a personal favor to me, please do not post this online or give it away to your friends. If someone gave this to you, punch them in the gut and tell them, “Clifford is awesome and he’s trying to help people learn economics. You are a jerk if you give his stuff away for free!” Then spit on them.

Again, thank you so much for your support. Good luck!

Link to Super Secret Hidden Videos
<https://www.youtube.com/watch?v=GK1NPld8BZw>

Macroeconomics Concepts and Videos

Unit 1: Basic Economic Concepts

UNIT 1 Overview- Introduction

- Scarcity
- Microeconomics vs. Macroeconomics
- Positive vs. Normative Economics
- Self-Interest and Incentives
- Marginal Analysis
- Opportunity Cost and Trade-offs
- Four Factors of Production
- Capital Goods and Future Growth

VIDEO 1.1- Production Possibilities Curve

- Efficiency
- Straight vs. Bowed PPC
- Law of Increasing Opportunity Costs

VIDEO 1.2- Shifting the PPC

- Shifters of the PPC

VIDEOS 1.3/1.4- Specialization and Trade

- Absolute and Comparative Advantage
- Terms of Trade

VIDEO 1.5- Comparative Advantage

- Output and Input Questions

VIDEO 1.6- Economic Systems

- Free-Market Economy
- Centrally Planned Economy

VIDEO 1.7- Circular Flow Model

- Product and Factor Markets
- Private and Public Sector
- Factor Payments
- Transfer Payments

VIDEO 2.1- Demand

- Law of Demand
- 5 Shifters (Determinants) of Demand
- Substitutes and Complements
- Normal Goods vs. Inferior Goods

VIDEO 2.2- Supply and Equilibrium

- Law of Supply
- 6 Shifters (Determinants) of Supply

VIDEO 2.3/2.4- Shifting Demand and Supply

- Equilibrium Price and Equilibrium Quantity
- Disequilibrium: Surplus and Shortage

VIDEO 2.5- Double Shifts

- Double Shift Rule

VIDEO 2.6- Price Controls and Efficiency

- Price Floors and Ceilings

Unit 2: Macro Measures

VIDEO 2.1/2.2- Gross Domestic Product (GDP)

- National Income Accounting
- Percent change in GDP and GDP per Capita
- Investment
- Intermediate Goods
- Household production
- Income Approach and Factor Payments
- Expenditures Approach ($C+I+G+X_n$)
- Nominal vs. Real GDP

VIDEO 2.3- Measuring Unemployment

- Labor force and Unemployment rate
- Frictional Unemployment
- Structural Unemployment
- Cyclical Unemployment
- Natural Rate of Unemployment (NRU)
- Full Employment Output
- Discouraged Workers
- Underemployed Workers

VIDEO 2.4- Inflation

- Purchasing power
- Inflation, Deflation, and Disinflation
- Helped vs. hurt by unanticipated
- Demand Pull and Cost Push Inflation
- Quantity Theory of Money
- Velocity of Money

VIDEO 2.5- Measuring Inflation

- Consumer Price Index (CPI)

VIDEO 2.6- GDP Deflator Practice

- GDP Deflator

VIDEO 2.7- The Business Cycle

- Four Phases of the Business Cycle

Unit 3: AD, AS, Fiscal Policy, and Growth

VIDEO 3.1- Aggregate Demand

- Aggregates and Price Level
- Wealth, Interest Rate, Foreign Trade Effects
- Shifter of Aggregate Demand

VIDEO 3.2- Aggregate Supply

- Shifters of Aggregate Supply
- Productivity

VIDEO 3.3- AD/AS in Short and Long-Run

- Long-Run Aggregate Supply (LRAS)
- Recessionary Gap
- Inflationary Gap

VIDEO 3.4- The Phillips Curve

- Inflation and Unemployment
- Long-Run Phillips Curve
- Connect to AD/AS Model

VIDEO 3.5- Graphing Practice

- Graphing Recessionary and Inflationary Gaps

VIDEO 3.6- Cost Push and Demand Pull Inflation

- Negative and Positive Supply Shocks
- Stagflation

VIDEO 3.7-Fiscal Policy

- Discretionary vs. Non-Discretionary
- Expansionary vs. Contractionary
- Autonomous Consumption
- Disposable Income and Dissaving

VIDEO 3.8- Keynesian vs. Classical Economics

- John Maynard Keynes
- Sticky Wages and Deficit Spending
- Three Ranges of Aggregate Supply

VIDEO 3.9/3.10/3.11/3.12- The Multiplier Effect

- Marginal Propensity to Consumer (MPC)
- Marginal Propensity to Save (MPS)
- Simple Spending Multiplier
- Tax multiplier

VIDEO 3.13- Problems with Fiscal Policy

- Deficit Spending and the National Debt
- Time Lags
- Crowding Out
- Net Export Effect
- Inflationary Expectations

VIDEO 3.14- Economic Growth

- Long-Run Adjustments
- Economic Growth
- Capital Stock

Unit 4: Money, Banking, and Monetary Policy

VIDEO 4.1- The Financial Sector

- Financial Sector, Assets, Liabilities

VIDEO 4.2- The Functions of Money

- Barter System and Coincidence of Wants
- Commodity vs. Fiat Money
- Exchange, Unit of Account, Store of Value

VIDEO 4.3- Time Value of Money

- Time Value of Money

VIDEO 4.4- Nominal vs. Real Interest Rates

- Nominal and Real Interest Rates
- Maturity and Bond Prices

VIDEO 4.5- The Federal Reserve (FED)

- The Role of the Central Bank
- Expansionary Monetary Policy
- Contractionary Monetary Policy

VIDEO 4.6/4.7- The Money Market

- Liquidity
- Asset Demand and Transaction Demand
- Demand and Supply of Money
- Shifters of Money Supply

VIDEO 4.8- Money Creation

- The Money Multiplier
- Fractional Reserve Banking
- Required Reserves and Excess Reserves
- Discount Rate and Open Market Operations
- Federal Funds Rate

VIDEO 4.9/4.10/4.11/4.12- Monetary Policy

- Graphing Monetary Policy

VIDEO 4.13- Bank Balance Sheets

- Balance Sheets With Assets and Liabilities
- Demand Deposits and Owners Equity

VIDEO 4.14- Loanable Funds Market

- Loanable Funds Shifters
- Crowding Out and Investment

Unit 5: Trade and Foreign Exchange

VIDEO 5.1- Balance of Payments

- Current Account and Financial Account
- Balance of Trade- Trade Surplus and Deficit
- Foreign Direct Investment
- Net Capital Outflow

VIDEO 5.2/5.3- Foreign Exchange (FOREX)

- Exchange Rates
- Appreciation vs. Depreciation
- Shifters of Currency Demand and Supply
- Effect on Net Exports

VIDEO 5.4- Exchange Rate Regimes

- Floating and Fixed Exchange Rates

Key Graphs

Production Possibilities Curve

Market Demand and Supply

Aggregate Demand and Supply and LRAS

The Philips Curve

The Money Market

Bank Balance Sheets

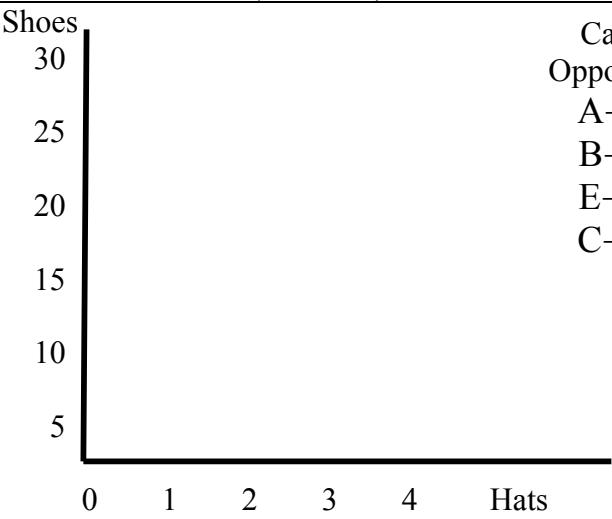
The Loanable Funds Market

Foreign Exchange (FOREX)

Macroeconomics Unit 1: Basic Economics Concepts

Key Terms- Define the following:	3 Economic Systems
1. Scarcity	1. Centrally Planned Economies
2. Consumer Goods vs. Capital Goods	2. Free-Market Economies (Capitalism)
3. Trade-offs	3. Mixed Economies
4. Opportunity Cost	

Production Possibilities Curve (Frontier)

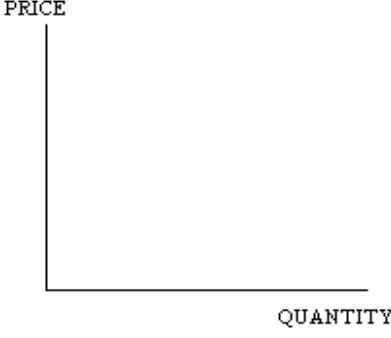
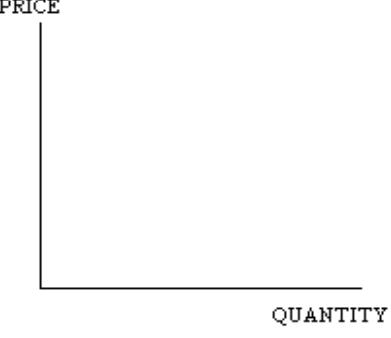
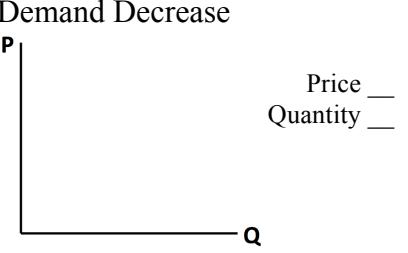
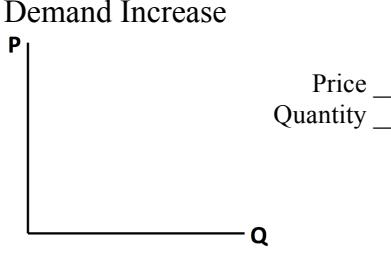
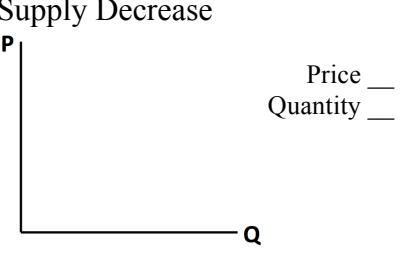
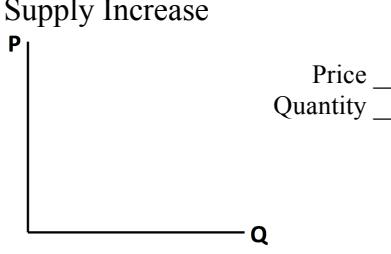
Use the chart to create a PPC to the right.		Calculate the Opportunity Cost: A→B: _____ B→C: _____ E→D: _____ C→A: _____
Label the following three points on the graph: X= Unemployment/Inefficiency Y= Efficient Z= Impossible given current resource		

Constant Opportunity Cost

Why does this occur?	Increasing Opportunity Cost
Why does this occur? Draw the graph below Bicycles  Tricycles	Why does this occur? Draw the graph below Bikes  iPhones

Key Terms	Shifting the PPC																			
Define Investment-	Identify the three shifters of the PPC																			
Define Capital Stock-																				
Production Possibilities Practice (draw 3 PPCs with pizza and cars)																				
Scenario: Workers lose their jobs due to a recession Pizza 	Scenario: Increase in consumer demand for pizza Pizza 	Scenario: More resources that improve the production of cars Pizza 																		
Cars	Cars	Cars																		
Absolute and Comparative Advantage																				
Output Questions	Input Questions																			
The table shows the amount of sugar and cars each country can make with the same number of resources	The table shows the number of hours it takes to produce a ton of sausage and a ton of computers																			
<table border="1"> <thead> <tr> <th></th> <th>Sugar (tons)</th> <th>Cars</th> </tr> </thead> <tbody> <tr> <td>Cuba</td> <td>40</td> <td>10</td> </tr> <tr> <td>Mexico</td> <td>50</td> <td>100</td> </tr> </tbody> </table>		Sugar (tons)	Cars	Cuba	40	10	Mexico	50	100	<table border="1"> <thead> <tr> <th></th> <th>Sausage</th> <th>Computers</th> </tr> </thead> <tbody> <tr> <td>Canada</td> <td>2</td> <td>6</td> </tr> <tr> <td>UK</td> <td>10</td> <td>10</td> </tr> </tbody> </table>			Sausage	Computers	Canada	2	6	UK	10	10
	Sugar (tons)	Cars																		
Cuba	40	10																		
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	Sausage	Computers																		
Canada	2	6																		
UK	10	10																		
<ol style="list-style-type: none"> Which country has an absolute advantage in sugar? How about cars? What is Cuba's opportunity cost for producing one car? Which country has a comparative advantage in cars? How about sugar? For both countries to benefit from trade, how much sugar can be traded for each car? 1 Car for _____ Sugar 	<ol style="list-style-type: none"> Which country has an absolute advantage in sausage? How about computers? What is Canada's opportunity cost for producing one computer? Which country has a comparative advantage in computers? How about sausage? For both countries to benefit from trade, how many sausages can be traded for each computer? 1 comp for _____ sausage 																			
Circular Flow Matrix (Model)																				
Product Market-	Draw the Circular Flow Matrix																			
Factor (Resource) Market-																				
Factor Payments-																				
Transfer Payments-																				

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Demand	Supply
The Law of Demand: P↑ Qd ____ P↓ Qd ____	The Law of Supply: P↑ Qs ____ P↓ Qs ____
What is the different between a change in quantity demanded and a change in demand?	
Changes in Demand and Supply (Shifting the Curve)	
What changes demand? (5 Shifters of Demand)	What changes supply? (5 Shifters of Supply)
Substitutes: Price of A↑ Demand for B ____ Price of A↓ Demand for B ____ Complements: Price of A↑ Demand for B ____ Price of A↓ Demand for B ____	Normal Goods: Income ↑ Demand ____ Income ↓ Demand ____ Inferior Goods: Income ↑ Demand ____ Income ↓ Demand ____
Equilibrium and Disequilibrium	Government Involvement
Draw a shortage 	Draw a surplus 
Price Ceiling- When binding, ceilings go ____ equilibrium and result in a ____	Price Floor- When binding, floors go ____ equilibrium and result in a ____
Supply and Demand Practice	Double Shift Practice
Demand Decrease 	Demand Increase 
Supply Decrease 	Supply Increase 
	If demand increases AND supply increases then price ____ and quantity ____
	Price 
	Quantity
	Double Shift Rule:

Seriously, thank you for buying this packet

Unit 2: Macro Measures	
Measuring Economic Growth	
<p>Definition of Gross Domestic Product (GDP)-</p> <p>What is the expenditures approach?</p> <p style="text-align: center;">GDP = _____ + _____ + _____ + _____</p> <p>What is the income approach?</p> <p style="text-align: center;">National Income = _____ + _____ + _____ + _____</p>	<p>Define Nominal GDP-</p> <p>Define Real GDP-</p> <p>Three things not included in GDP:</p> <ol style="list-style-type: none"> 1. 2. 3.
Business Cycle	Measuring Unemployment
<p>Label peak, recession/contraction, trough, expansion</p> <p>Real GDP</p>	<ol style="list-style-type: none"> 1. Frictional Unemployment: 2. Structural Unemployment 3. Cyclical Unemployment
Unemployment Rate Equation	
Practice: True or False	Natural Rate on Unemployment (NRU)
<ol style="list-style-type: none"> 1. Investment spending is spending on financial assets like stocks and bonds 2. Transfer payments are not counted in the calculation of GDP 3. If the nominal GDP increases then the economy is definitely experiencing inflation 4. An economy is not at full employment unless there is no unemployment 5. Countries that have generous unemployment benefits tend to have higher natural rates of unemployment 6. Lumberjacks are structurally unemployed when they are replaced by machines 	<p>What is the natural rate of unemployment?</p>
Problems With Unemployment Rate	
	<p>What are discouraged job seekers?</p> <p>What are underemployed (part-time) workers?</p>

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Consumer Price Index (CPI)	GDP Deflator																
What is the CPI? Consumer Price Index (CPI) Equation-	What is the GDP Deflator? GDP Deflator Equation-																
CPI Practice	GDP Deflator Practice																
<p>1. Assume the value of a market basket for a given year is \$550 and the same basket in the base year was \$500. Calculate the CPI.</p> <p>2. If the CPI for a given year is 90 then the change in prices between that year and the base year is _____</p> <p>3. Fill in the blanks in the chart below. Start with 2009 as the base year then recalculate with 2010 as the base year.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Year</th> <th style="text-align: center;">Market Basket</th> <th style="text-align: center;">Base Year 2009</th> <th style="text-align: center;">Base Year 2010</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2009</td> <td style="text-align: center;">\$20</td> <td style="text-align: center;">100</td> <td></td> </tr> <tr> <td style="text-align: center;">2010</td> <td style="text-align: center;">\$40</td> <td></td> <td style="text-align: center;">100</td> </tr> <tr> <td style="text-align: center;">2011</td> <td style="text-align: center;">\$50</td> <td></td> <td></td> </tr> </tbody> </table>	Year	Market Basket	Base Year 2009	Base Year 2010	2009	\$20	100		2010	\$40		100	2011	\$50			<p>1. The Nominal GDP is \$100 billion and the Real GDP is \$80 billion. Calculate the GDP deflator.</p> <p>2. The Real GDP is \$100 billion and the GDP deflator is 200. Calculate the Nominal GDP.</p> <p>3. The Real GDP is \$200 billion and the GDP deflator is 120. Calculate the Nominal GDP.</p> <p>4. The Nominal GDP is \$300 billion and the GDP deflator is 150. Calculate the Real GDP.</p> <p>5. The Nominal GDP is \$100 billion and the GDP deflator is 125. Calculate the Real GDP.</p>
Year	Market Basket	Base Year 2009	Base Year 2010														
2009	\$20	100															
2010	\$40		100														
2011	\$50																
Helped or Hurt by Unanticipated Inflation	Key Terms																
Assume expected inflation is 2% but actual inflation turns out to be 5%. Who is helped and hurt by inflation? <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Helped</td> <td style="width: 50%; text-align: center;">Hurt</td> </tr> </table>	Helped	Hurt	Define deflation- Define disinflation- Define Velocity of Money-														
Helped	Hurt																
Three Causes of Inflation	Quantity Theory of Money																
1. 2. 3.	Quantity Theory of Money Equation: $\underline{\quad} \times \underline{\quad} = \underline{\quad} \times \underline{\quad}$ $\underline{\quad} = \underline{\quad} = \underline{\quad} = \underline{\quad}$ <p>Assume the amount of money is \$5 and it is being used to buy 10 products with a price of \$2 each.</p> <p>1. How much is the velocity of money?</p> <p>2. If the velocity and output stay the same, what will happen if the amount of money increases to \$10?</p>																

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Unit 3: Aggregate Demand, Aggregate Supply, and Fiscal Policy	
AD, AS, and LRAS	Short Run vs. Long Run Aggregate Supply
Draw the economy at full employment	<ol style="list-style-type: none"> 1. In the short run, wages and resource prices will _____ as price levels increase 2. In the long run, wages and resource prices will _____ as price levels increase
	Shifters of AD and AS
	<p>Shifters of Aggregate Demand</p> <ol style="list-style-type: none"> 1. 2. 3. 4. <p>Shifters of Aggregate Supply</p> <ol style="list-style-type: none"> 1. 2. 3.
Recessionary Gap	Inflationary Gap
Draw an economy in a recession	Draw an economy with an inflationary gap
Graphing Practice	Define Key Terms
Draw an economy at full employment. Show what happens to price level and GDP if consumption falls	<p>Negative Supply Shock-</p> <p>Positive Supply Shock-</p> <p>Stagflation-</p> <p>Autonomous Consumption-</p> <p>Disposable Income-</p>

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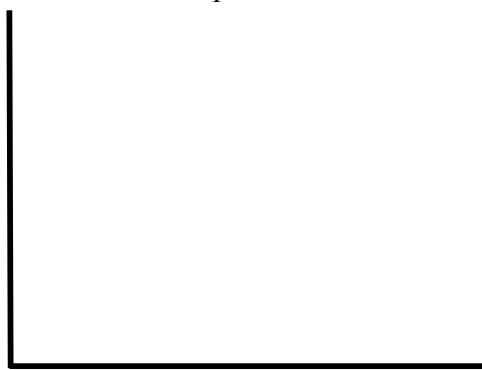
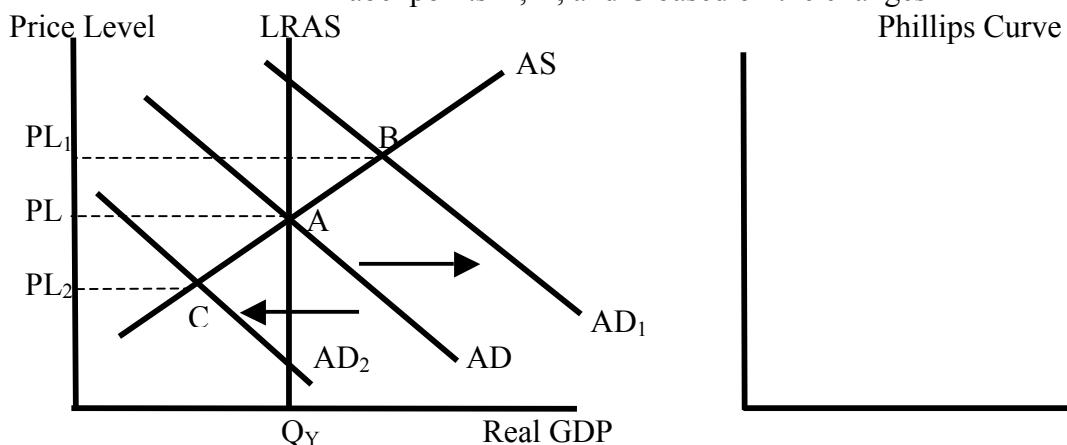
Classical vs. Keynesian Economics		Fiscal Policy
What is classical economic theory?		Define Discretionary Fiscal Policy-
What is Keynesian economic theory?		Define Non-Discretionary Fiscal Policy-
Three Ranges of the Aggregate Supply Curve		Government Spending and Taxation
Draw and label the three ranges of the AS curve		Expansionary Fiscal Policy- Contractionary Fiscal Policy-
		The Multiplier Effect
What is the Multiplier Effect?		Define Marginal Propensity to Consume (MPC)- Define Marginal Propensity to Save (MPS)-
Simple Spending Multiplier		Tax Multiplier
Policy and Multiplier Practice		
		1. Is there a recessionary or inflationary gap? 2. If the government does no policy and resource prices are flexible, in the long run wages will _____ and aggregate supply will _____. 3. If fiscal policy is used to close they gap the government could _____ spending or _____ taxes on consumers Assume the MPC is .5: 4. What is the least amount of government spending that could potentially close the gap? 5. How much could the government cut taxes to close the gap? Now assume that the MPC is .8: 6. What is the least amount of government spending that could potentially close the gap?
Problem with Fiscal Policy		Inflationary Expectations
1. Deficit Spending- 2. Time Lags- 3. Crowding out-		What happens to aggregate supply when people expect inflation?

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Short Run and Long Run Phillips Curve

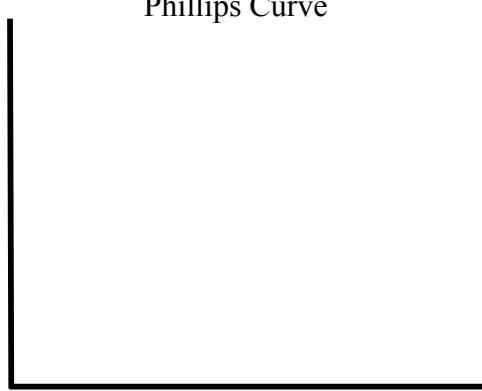
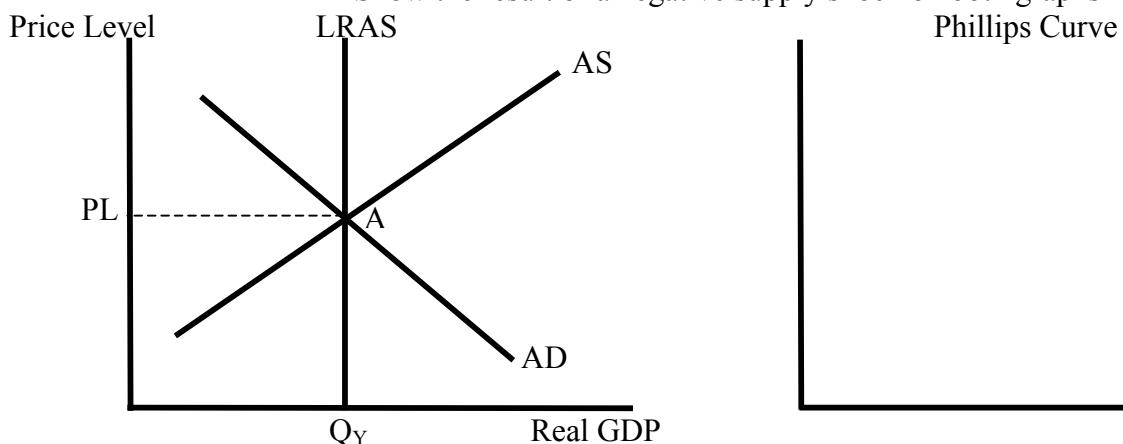
Draw and label the short and long run Phillips curve.

Label points A, B, and C based on the changes in AD



Draw and label the short and long run Phillips curve and label point A.

Show the result of a negative supply shock on both graphs



Economic Growth Practice

1. If interest rates fall, investment ____ causing capital stock to ____ and economic growth to ____.
2. If interest rates go up, investment ____ causing capital stock to ____ and economic growth to ____.

True or False

3. An increase in consumer spending leads to more economic growth in the long run.
4. Crowding out due to deficit spending causes less economic growth.
5. When the long run aggregate supply shifts right the natural rate of unemployment increases.
6. A sustained increase in productivity causes both the long run aggregate supply curve and production possibilities curve to shift right.
7. Jacob Clifford is very attractive.

Showing Economic Growth with AD and AS

Draw an economy at full employment. Show what happens in the long run if investment increases

Unit 4: The Financial Sector, Money, and Monetary Policy	
Define Key Terms	The Three Functions of Money
The Financial Sector-	1. 2. 3.
Assets-	
Liabilities-	Types of Money
Liquidity-	1. Commodity Money 2. Fiat Money
The Demand for Money	The Money Market Graph
What is the transaction demand for money?	Draw the demand and supply of money and label the equilibrium nominal interest rate
What is the asset demand for money?	
Interest rate ↑, the quantity of money demanded _____ Interest rate ↓, the quantity of money demanded _____	
Shifters of Money Demand	
Shifters of Money Supply	Money Market Practice
	1. Unexpected inflation causes the demand for money to _____ and the interest rate to _____. 2. If the supply of money increased, the interest rate will _____ and investment will _____. True or False 3. When the interest rate is high, the opportunity cost of holding money increases so the quantity of money demanded will decrease. 4. The money supply includes all assets like cash, demand deposits, bonds, and real estate. 5. Monetary policy is when the central banks changes the interest rates by changing the money supply

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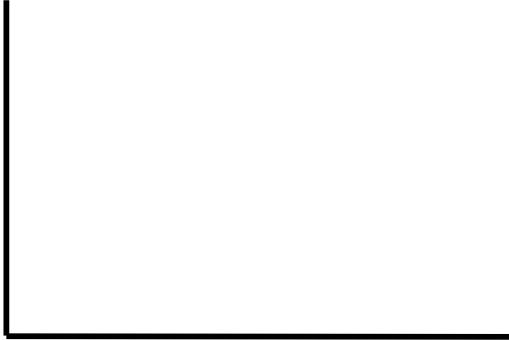
The Federal Reserve (The Fed)	Money Multiplier Equation																		
What is the Federal Reserve and what does it do?																			
Money Multiplier Practice	Shifter Practice																		
<p>1. Assume the reserve requirement is .10. If the Fed buys \$10 billion worth of bonds the money supply will _____ by _____ billion.</p> <p>2. Assume the reserve requirement is .20. If the Fed sells \$10 billion worth of bonds the money supply will _____ by _____ billion.</p> <p>3. Assume the reserve requirement is .10. If the Fed buys \$5 billion worth of bonds the money supply will _____ by _____ billion.</p> <p>4. Assume the reserve requirement is .50. If the Fed sells \$5 billion worth of bonds the money supply will _____ by _____ billion.</p> <p>5. Assume the reserve requirement is .25. If the Fed sells \$2 billion worth of bonds the money supply will _____ by _____ billion.</p>	<p>1. If the FED increases the reserve requirement the money supply will _____ and interest rates _____. 2. If the FED sells bonds the money supply will _____ interest rates _____, and investment _____. 3. If the FED decreases the reserve requirement the money supply will _____ and interest rates _____. 4. If the FED decreases the discount rate, the money supply will _____ and interest rates _____. 5. If the FED buys bonds the money supply will _____ interest rates _____, and investment _____. Federal Funds Rate Federal Funds Rate-</p>																		
Bonds	Interest Rates and Inflation																		
What is maturity? If the interest rate increases, bond prices will _____. If the interest rate decreases, bond prices will _____.	<p>1. If the nominal interest rate is 7% and expected inflation is 3%, what is the real interest rate? 2. If the real interest rate is -2% and the nominal interest rate was 3%, what was the inflation rate? Real interest rate = Nominal interest rate =</p>																		
Bank Balance Sheets																			
Define Fractional Reserve Banking- Define Excess Reserves-	Define Demand Deposits- Define Owner's Equity-																		
<p>1. If the reserve requirement is .1 (or 10%) how much is this bank's required reserves and excess reserves?</p> <p>2. What is the maximum possible increase in the money supply if the bank loaned out all its excess reserves?</p> <p>3. Assume a customer deposits \$5,000 into this bank, what is the initial change in the money supply?</p> <p>4. If the \$5,000 deposit is placed in reserve, how much is demand deposits and excess reserves?</p>	<p>Use the bank balance sheet to answer the questions</p> <table border="1"> <thead> <tr> <th>Assets</th> <th>Liabilities</th> </tr> </thead> <tbody> <tr> <td>Loans</td> <td>\$15,000</td> <td>Demand Deposits</td> <td>\$20,000</td> </tr> <tr> <td>Total Reserves</td> <td>\$5,000</td> <td>Owner's Equity</td> <td>\$10,000</td> </tr> <tr> <td>Treasury Bonds</td> <td>\$10,000</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>\$30,000</td> <td>Total</td> <td>\$30,000</td> </tr> </tbody> </table> <p>5. Assume a customer withdraws \$15,000. Identify three options this bank has to avoid defaulting other than asking borrowers to pay back loans.</p>	Assets	Liabilities	Loans	\$15,000	Demand Deposits	\$20,000	Total Reserves	\$5,000	Owner's Equity	\$10,000	Treasury Bonds	\$10,000			Total	\$30,000	Total	\$30,000
Assets	Liabilities																		
Loans	\$15,000	Demand Deposits	\$20,000																
Total Reserves	\$5,000	Owner's Equity	\$10,000																
Treasury Bonds	\$10,000																		
Total	\$30,000	Total	\$30,000																

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Monetary Policy and AD/AS**

Draw and label both graphs and show the economy in a recession.

Use the money market graph to show how the FED closes the recessionary gap using monetary policy
Money Market AD and AS



Use arrows to explain the process:

Draw and label both graphs and show the economy with an inflationary gap.

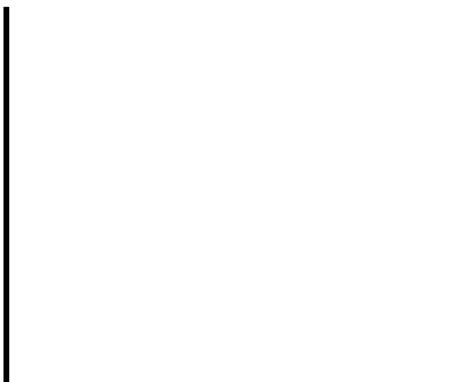
Use the money market graph to show how the FED closes the inflationary gap using monetary policy
Money Market AD and AS



Use arrows to explain the process:

The Loanable Funds Market

Draw the loanable funds market and label the equilibrium real interest rate



Shifters of Demand for Loanable Funds

Shifters of Supply for Loanable Funds

Loanable Funds Practice

1. What happens to the real interest rate if the government runs a deficit?
2. If lenders decide to lend less, real interest rates _____, investment _____, and economic growth _____
3. An increase in savings would cause real interest rates to _____, investment _____, and economic growth _____

Seriously, thank you!

Unit 5: International Trade	
Define Key Terms	Balance of Payments
Exports-	What is the Balance of Payments?
Imports-	
Net Exports (X_N)-	What is the Current Account?
Trade Deficit-	What is the Financial Account?
Trade Surplus-	
Interest Rates and Capital Flows	Balance of Payments Practice
Net Capital Flow-	Identify if the example would be included in the current account or the financial account for the US
What is the difference between capital inflows and capital outflows?	<ol style="list-style-type: none"> 1. A US company sells ten jets in Canada 2. An American company buys a beach resort in Mexico 3. A Chinese company sells toys in the US 4. An American on vacation buys Japanese government bonds 5. An immigrant living in the US sends his earning to his family overseas 6. An American company produces and sells cars in the US 7. An Italian tourists buys souvenirs in the US
Interest rate ↑, the capital inflows _____	
Interest rate ↓, the capital inflows _____	
Interest rate ↑, the capital outflows _____	
Interest rate ↓, the capital outflows _____	
The Foreign Exchange Market	Currency Valuation
Draw the foreign exchange market for US dollars (\$) relative to Japanese Yen (¥)	<p>Define Appreciation-</p> <p>Define Depreciation-</p>
FOREX Shifters	
Show on the graph what happens to the value of the dollar if American want more Japanese products	

Please don't post online. Thanks.

Interest Rates and Foreign Exchange	Appreciation and Depreciation Practice
<p>Draw the foreign exchange market for Mexican Pesos. Show what happens to the value of pesos relative to the US dollar if interest rates in Mexico increase</p> 	<ol style="list-style-type: none"> 1. If American tourists increase visits to Japan, the supply of US dollars will _____ and the demand for Japanese yen will _____. The dollar will _____ and the yen will _____ 2. If the US government significantly decreases personal income taxes, the dollar will _____ and the yen will _____ 3. If inflation in the Japan rises significantly faster than in the US, the dollar will _____ and the yen will _____ 4. If Japan has a large budget deficit that increases Japanese interest rates, the dollar will _____ and the yen will _____ 5. If Japan places high tariffs on all US imports, the dollar will _____ and the yen will _____ 6. The US suffers a larger recession the dollar will _____ and the yen will _____
Foreign Exchange and Net Exports	Exchange Rate Regimes
<p>If a country's currency appreciates, net exports _____ If a country's currency depreciates, net exports _____ 1. The US dollar will appreciate relative to another currency if demand for the dollar _____ or if supply _____. This will cause US exports to _____ and imports to _____. 2. The US dollar will depreciate relative to another currency if demand for the dollar _____ or if supply _____. This will cause US exports to _____ and imports to _____.</p>	<p>What are floating exchange rates? What are fixed exchange rates? How does a government fix, or peg, its exchange rate?</p>

Congratulation! You are done with macroeconomics

Macroeconomics Unit 1: Basic Economics Concepts

Key Terms- Define the following:	3 Economic Systems
<p>1. Scarcity Individuals, businesses, and governments have unlimited wants but limited resources.</p> <p>2. Consumer Goods vs. Capital Goods Consumer goods- (ex: pizza) goods made for direct consumption Capital goods- (ex: restaurant oven) goods made for indirect consumption. Goods that make consumer goods</p> <p>3. Trade-offs ALL possible options given up when you make a choice</p> <p>4. Opportunity Cost The ONE best option given up when you make a choice including the money, time, and forgone opportunities.</p>	<p>1. Centrally Planned Economies Economic system where the government owns the resources and decides what to make, how to make it, and who gets it. Total government control of the economy</p> <p>2. Free-Market Economies (Capitalism) Economic system where individual citizens own the resources and decides what to make, how to make it, and who gets it. Little or no government involvement in the economy</p> <p>3. Mixed Economies Almost all economies are a mixture of the above systems.</p>

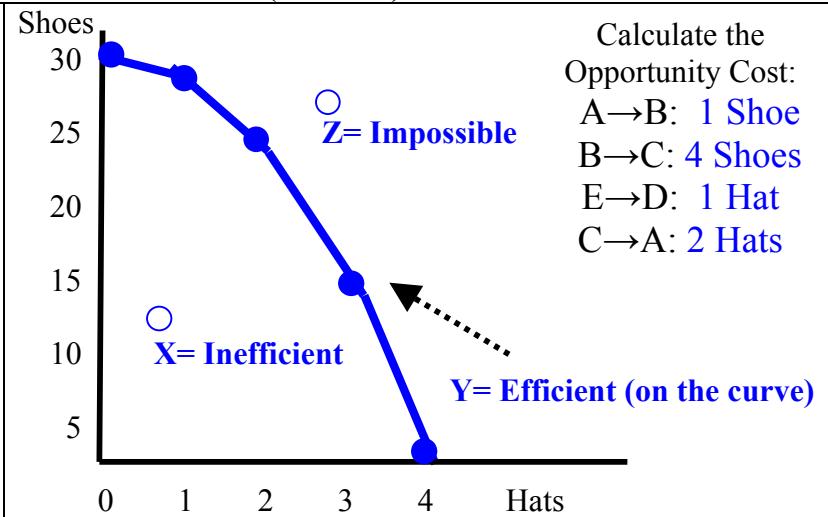
Production Possibilities Curve (Frontier)

Use the chart to create a PPC to the right.

	A	B	C	D	E
Hats	0	1	2	3	4
Shoes	30	29	25	15	0

Label the following three points on the graph:

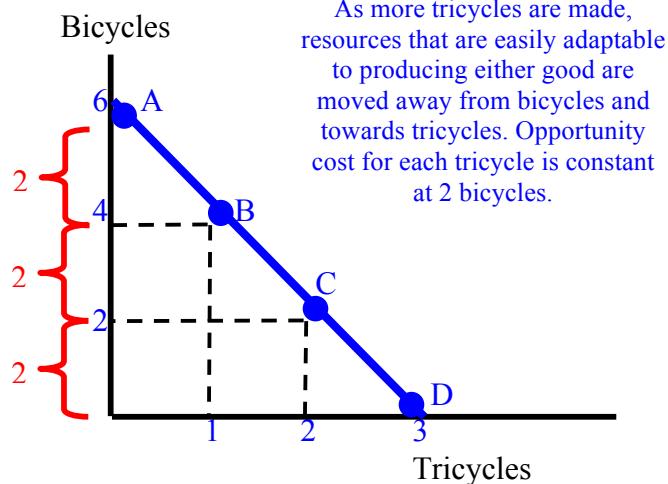
- X= Unemployment/Inefficiency
- Y= Efficient
- Z= Impossible given current resource



Constant Opportunity Cost

Why does this occur? Resources are easily adaptable between both products.

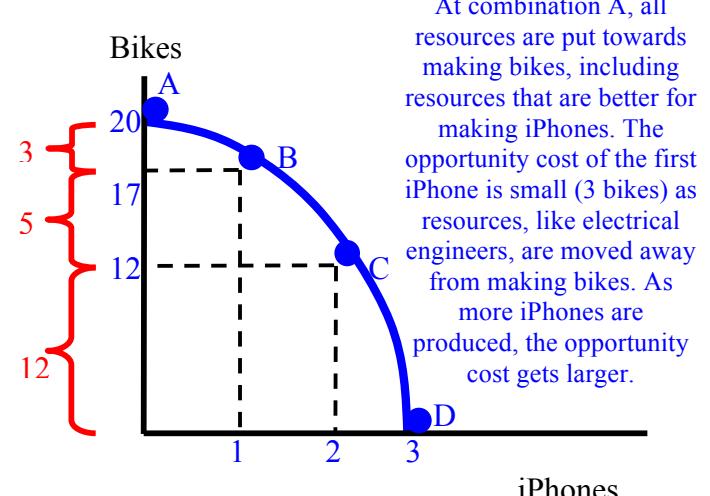
Draw the graph below

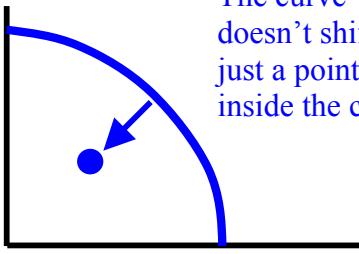
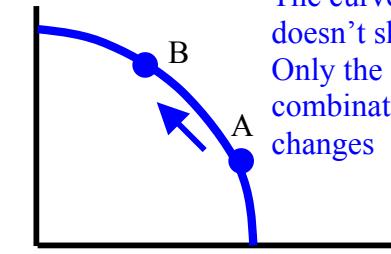
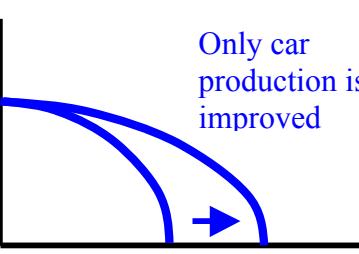


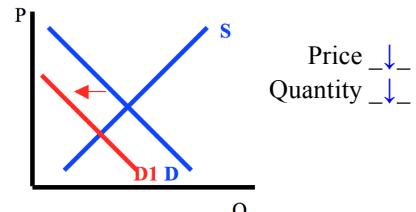
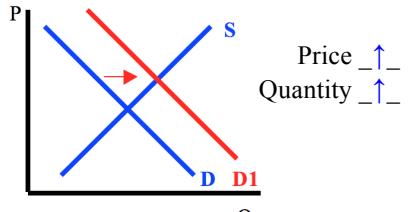
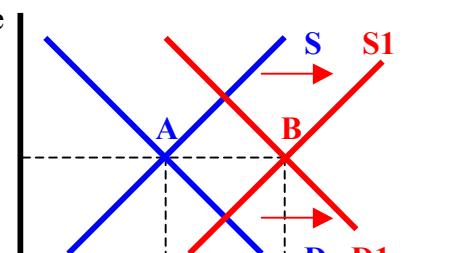
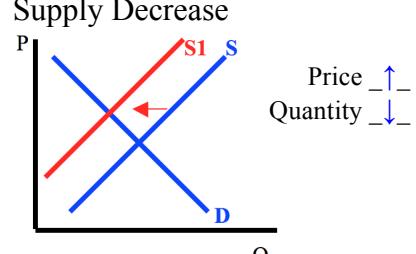
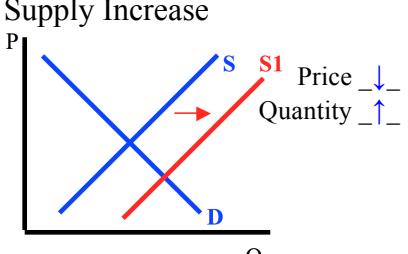
Increasing Opportunity Cost

Why does this occur? Resources are not easily adaptable between both products

Draw the graph below



Key Terms		Shifting the PPC																			
<p>Define Investment- Investment is business spending on capital (tools and machinery) that makes businesses more productive</p> <p>Define Capital Stock- Capital stock is the amount of capital businesses have. The more capital stock, the more output they can make</p>		Identify the three shifters of the PPC 1. Change in resource quantity or quality 2. Change in Technology 3. Change in Trade (Doesn't change the amount they can produce, but it does change the amount they can consume)																			
Production Possibilities Practice (draw 3 PPCs with pizza and cars)																					
Pizza  Cars	The curve doesn't shift. It is just a point inside the curve	Pizza  Cars	The curve doesn't shift. Only the combination changes																		
Pizza  Cars	Only car production is improved	Pizza	Cars																		
Absolute and Comparative Advantage																					
Output Questions		Input Questions																			
The table shows the amount of sugar and cars each country can make with the same number of resources <table border="1" data-bbox="114 992 775 1193"> <thead> <tr> <th></th><th>Sugar (tons)</th><th>Cars</th></tr> </thead> <tbody> <tr> <td>Cuba</td><td>40 (1S costs $\frac{1}{4}$ Car)</td><td>10 (1C costs 4 Sugar)</td></tr> <tr> <td>Mexico</td><td>50 (1S costs 2 Cars)</td><td>100 (1C costs $\frac{1}{2}$ Sugar)</td></tr> </tbody> </table>			Sugar (tons)	Cars	Cuba	40 (1S costs $\frac{1}{4}$ Car)	10 (1C costs 4 Sugar)	Mexico	50 (1S costs 2 Cars)	100 (1C costs $\frac{1}{2}$ Sugar)	The table shows the number of hours it takes to produce a ton of sausage and a ton of computers <table border="1" data-bbox="824 992 1509 1193"> <thead> <tr> <th></th><th>Sausage</th><th>Computers</th></tr> </thead> <tbody> <tr> <td>Canada</td><td>2 (1S costs $\frac{1}{3}$ comp)</td><td>6 (1C costs 3 sausg)</td></tr> <tr> <td>UK</td><td>10 (1S costs 1 comp)</td><td>10 (1C costs 1 sausg)</td></tr> </tbody> </table>			Sausage	Computers	Canada	2 (1S costs $\frac{1}{3}$ comp)	6 (1C costs 3 sausg)	UK	10 (1S costs 1 comp)	10 (1C costs 1 sausg)
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UK	10 (1S costs 1 comp)	10 (1C costs 1 sausg)																			
1. Which country has an absolute advantage in sugar? How about cars? Mexico/Mexico 2. What is Cuba's opportunity cost for producing one car? 4 sugar 3. Which country has a comparative advantage in cars? How about sugar? Mexico/Cuba 4. For both countries to benefit from trade, how much sugar can be traded for each car? 1 Car for 1 Sugar (any number between 4 and $\frac{1}{2}$)		1. Which country has an absolute advantage in sausage? How about computers? Canada/Canada 2. What is Canada's opportunity cost for producing one computer? 3 sausage 3. Which country has a comparative advantage in computers? How about sausage? UK/Canada 4. For both countries to benefit from trade, how many sausages can be traded for each computer? 1 comp for 2 sausage (any number between 3 and 1)																			
Circular Flow Matrix (Model)																					
Product Market- Places where individuals buy goods and services from businesses Factor (Resource) Market- Places where businesses buy the factors (land, labor, capital) from individuals Factor Payments- Payments made by businesses. Rent for land, wages for labor, interest for capital Transfer Payments- Payments made by the government to meet a specific goal rather than pay for goods and services (ex: welfare)		Draw the Circular Flow Matrix  <pre> graph TD Business[Businesses] -- "Resources" --> ResourceMarket[Resource Market] ResourceMarket -- "Income" --> Individual[Individuals] Individual -- "Spending" --> ProductMarket[Product Market] ProductMarket -- "Revenue" --> Business Business -- "Costs" --> ResourceMarket ResourceMarket -- "Factors of Production" --> Individual Individual -- "Goods and Services" --> ProductMarket ProductMarket -- "Demand" --> Business </pre>																			

Demand	Supply	
The Law of Demand: Inverse relationship between price and quantity demanded $P \uparrow Q_d \downarrow$ $P \downarrow Q_d \uparrow$	The Law of Supply: Direct relationship between price and quantity supplied $P \uparrow Q_s \uparrow$ $P \downarrow Q_s \downarrow$	
What is the difference between a change in quantity demanded and a change in demand?		
A change in quantity demanded is movement along the curve due to a change in price. A change in demand is when the entire demand curve shifts left or right due to a change in one of the shifters		
Changes in Demand and Supply (Shifting the Curve)		
What changes demand? (5 Shifters of Demand) 1. Tastes and preferences 2. Number of consumers 3. Price of related goods- Substitutes and complements 4. Income 5. Future expectations	What changes supply? (5 Shifters of Supply) 1. Prices/availability of inputs (resources) 2. Number of producers 3. Technology 4. Government action: taxes & subsidies 5. Expectations of future profit	
Substitutes: Price of A \uparrow Demand for B \uparrow Price of A \downarrow Demand for B \downarrow	Normal Goods: Income \uparrow Demand \uparrow Income \downarrow Demand \downarrow	
Complements: Price of A \uparrow Demand for B \downarrow Price of A \downarrow Demand for B \uparrow	Inferior Goods: Income \uparrow Demand \downarrow Income \downarrow Demand \uparrow	
Equilibrium and Disequilibrium		
Draw a shortage	Draw a surplus	Price Ceiling- Legal cap on prices designed to keep prices artificially low When binding, ceilings go <u>below</u> equilibrium and result in a <u>shortage</u> . Price Floor- Minimum legal price sellers can sell a product When binding, floors go <u>above</u> equilibrium and result in a <u>surplus</u> . Subsidy- Government payment to producers designed to encourage them to produce more
Supply and Demand Practice		
Demand Decrease 	Demand Increase 	If demand increases AND supply increases then price <u>indeterminate</u> and quantity <u>increases</u> 
Supply Decrease 	Supply Increase 	Double Shift Rule: If TWO curves shift at the same time, EITHER price or quantity will be indeterminate.

Did you pay for this? If not, you're a jerk.

Unit 2: Macro Measures

Measuring Economic Growth

Definition of Gross Domestic Product (GDP)-
The dollar value of all final goods and services produced within a country's borders in one year.

What is the expenditures approach?
The expenditure approach adds up all the spending done in the economy by households, businesses, the government, and other countries.

$$GDP = C + I + G + (X - M)$$

What is the income approach?
The income approach adds up all the income earned in the economy including wages, rent, interest, and profit

$$\text{National Income} = W + R + i + PR$$

Define Nominal GDP-
GDP measured in current prices. It does not account for inflation from year to year.

Define Real GDP-
GDP adjusted for inflation and expressed in constant, or unchanging, dollars

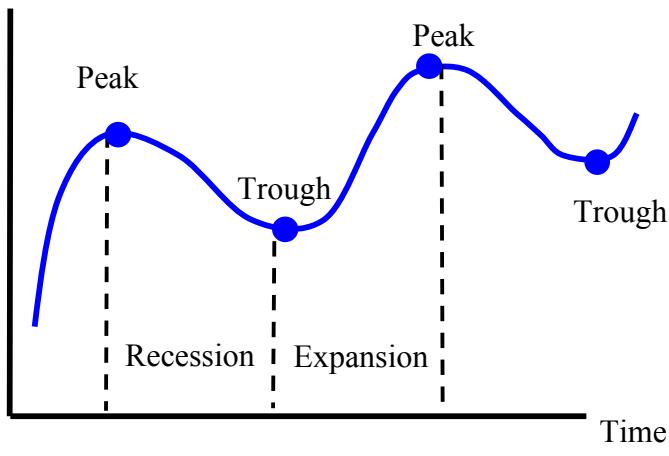
Three things not included in GDP:

1. Intermediate goods- GDP includes only final goods (ex: price of finished car, not the radio, tires, etc.)
2. Non-production transactions including used goods or financial transactions. (ex: stocks, real estate, social security)
3. Non-market Activities- (ex: illegal production or labor)

Business Cycle

Label peak, recession/contraction, trough, expansion

Real GDP



Measuring Unemployment

1. Frictional Unemployment:
Temporarily unemployed or being between jobs. Individuals are qualified workers with transferable skills but they aren't working.
2. Structural Unemployment
Changes in the structure of the labor force make some skills obsolete. Workers DO NOT have transferable skills and these jobs will never come back.
3. Cyclical Unemployment
Unemployment that results from economic downturns (recessions). As demand for goods and services falls, demand for labor falls and workers are fired.

Unemployment Rate Equation

$$\text{Unemployment rate} = \frac{\# \text{ unemployed}}{\# \text{ in labor force}} \times 100$$

Practice: True or False

1. Investment spending is spending on financial assets like stocks and bonds **False**
2. Transfer payments are not counted in the calculation of GDP **True**
3. If the nominal GDP increases then the economy is definitely experiencing inflation **False**
4. An economy is not at full employment unless there is no unemployment **False**
5. Countries that have generous unemployment benefits tend to have higher natural rates of unemployment **True**
6. Lumberjacks are structurally unemployed when they are replaced by machines **True**

Natural Rate on Unemployment (NRU)

What is the natural rate of unemployment?
The amount of unemployment that exists when the economy is healthy. The economy is at full employment when there is no cyclical unemployment

Problems With Unemployment Rate

What are discouraged job seekers?
People that are no longer looking for a job because they gave up. Since these people are not counted in the labor force, the unemployment rate may be too low.
What are underemployed (part-time) workers?
Someone who wants more hours but can't get them is still considered fully employed. The unemployment rate ignores the plight of such workers.

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Consumer Price Index (CPI)	GDP Deflator
What is the CPI? CPI is an index number that shows how prices change over time for a fixed basket of consumer goods Consumer Price Index (CPI) Equation- $\text{CPI} = \frac{\text{Price of market basket}}{\text{Price of market basket in base year}} \times 100$	What is the GDP Deflator? The deflator is an index number that measures all prices and is used to convert nominal GDP into real GDP Deflator Equation- $\text{GDP Deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$
CPI Practice	GDP Deflator Practice
1. Assume the value of a market basket for a given year is \$550 and the same basket in the base year was \$500. Calculate the CPI. $\text{CPI} = 110$ 2. If the CPI for a given year is 90 then the change in prices between that year and the base year is <u>-10%</u> 3. Fill in the blanks in the chart below. Start with 2009 as the base year then recalculate with 2010 as the base year.	1. The Nominal GDP is \$100 billion and the Real GDP is \$80 billion. Calculate the GDP deflator. 125 (prices are 25% higher since the base year) 2. The Real GDP is \$100 billion and the GDP deflator is 200. Calculate the Nominal GDP. $\text{Nominal GDP} = \$200 \text{ billion}$ 3. The Real GDP is \$200 billion and the GDP deflator is 120. Calculate the Nominal GDP. $\text{Nominal GDP} = \$240 \text{ billion}$ 4. The Nominal GDP is \$300 billion and the GDP deflator is 150. Calculate the Real GDP. $\text{Real GDP} = \$200 \text{ billion}$ 5. The Nominal GDP is \$100 billion and the GDP deflator is 125. Calculate the Real GDP. $\text{Real GDP} = \$80$ (same as question #1)
Helped or Hurt by Unanticipated Inflation	Key Terms
Assume expected inflation is 2% but actual inflation turns out to be 5%. Who is helped and hurt by inflation?	Define deflation- A decrease in the general price level. The opposite of inflation Define disinflation- A decrease in the rate of inflation. Prices are going up, but not as fast as before Define Velocity of Money- The velocity of money is the average times a dollar is spent and re-spent in a specific period of time
Three Causes of Inflation	Quantity Theory of Money
1. The Government prints money to pay citizens and pay off debts (see the Quantity Theory of money) Usually causes hyperinflation. Examples: Germany after WWI, Zimbabwe in 2008, 2. Demand-Pull Inflation- An overheated economy with excessive spending but same amount of goods. 3. Cost-Push Inflation- The result of a “negative supply shock” that increases the costs of production and forces producers to increase prices. Example: A significant increase in the price of oil would lead to higher costs for firms and higher prices.	Quantity Theory of Money Equation: $M \times V = P \times Q$ M = Money Supply P = Price Level V = Velocity of Money Q = Quantity/Output Assume the amount of money is \$5 and it is being used to buy 10 products with a price of \$2 each. 1. How much is the velocity of money? 4 2. If the velocity and output stay the same, what will happen if the amount of money increases to \$10? Price level will also double.

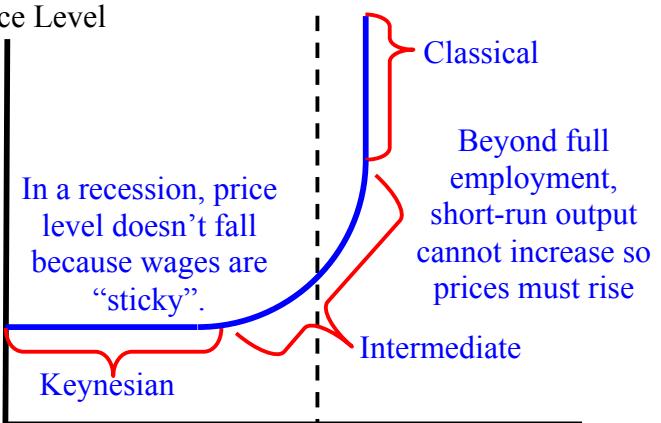
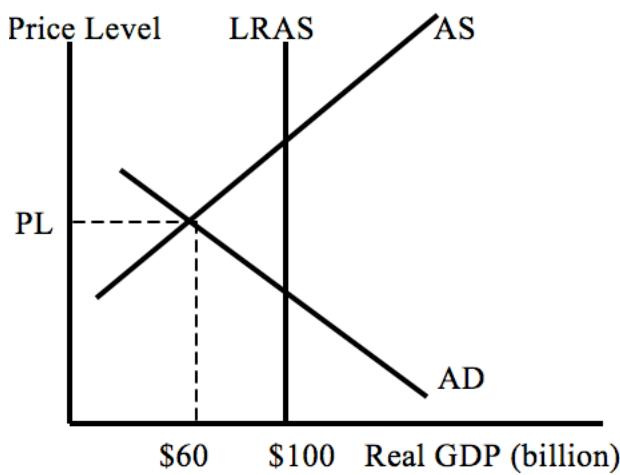
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Unit 3: Aggregate Demand, Aggregate Supply, and Fiscal Policy

AD, AS, and LRAS	Short Run vs. Long Run Aggregate Supply
<p>Draw the economy at full employment</p>	<p>1. In the short run, wages and resource prices will <u>NOT increase</u> as price levels increase</p> <p>2. In the long run, wages and resource prices will <u>increase</u> as price levels increase</p> <p>Shifters of AD and AS</p> <p>Shifters of Aggregate Demand</p> <ol style="list-style-type: none"> 1. Consumer Spending 2. Investment Spending 3. Government Spending 4. Net Exports (Exports – Imports) <p>Shifters of Aggregate Supply</p> <ol style="list-style-type: none"> 1. Resource Prices 2. Actions of the Government (ex: taxes, regulations) 3. Productivity
<p>Recessionary Gap</p> <p>Draw an economy in a recession</p>	<p>Inflationary Gap</p> <p>Draw an economy with an inflationary gap</p>
<p>Graphing Practice</p> <p>Draw an economy at full employment. Show what happens to price level and GDP if consumption falls</p>	<p>Define Key Terms</p> <p>Negative Supply Shock- An unexpected decrease in the availability of a key resource that temporarily decreases productivity</p> <p>Positive Supply Shock- An unexpected increase in the availability of a key resource that temporarily increases productivity</p> <p>Stagflation- When there is high inflation and a sluggish economy. Usually accompanies a negative supply shock.</p> <p>Autonomous Consumption- The minimum amount of consumer spending when people have no income</p> <p>Disposable Income- The amount of money households have to spend or save after taxes</p>

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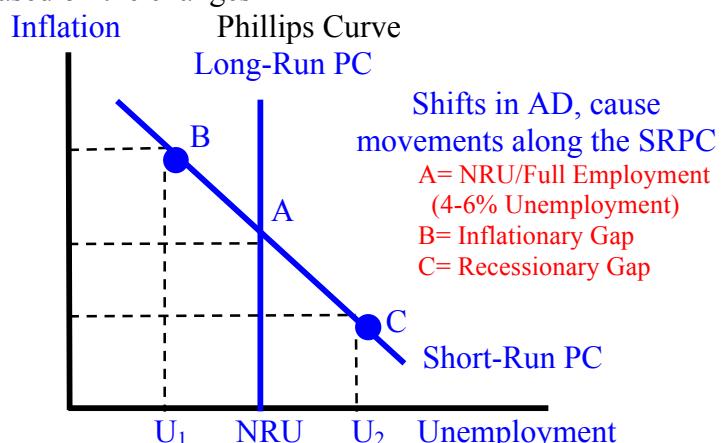
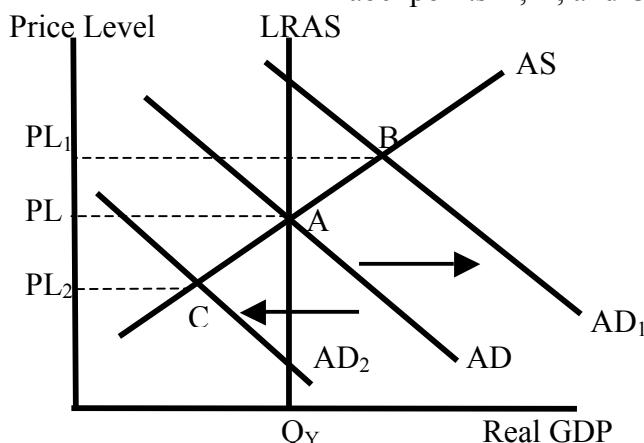
Classical vs. Keynesian Economics		Fiscal Policy				
What is classical economic theory? The belief that the economy self corrects and government intervention will do more harm than good What is Keynesian economic theory? The belief that the government should actively manipulate the economy to reach full employment		Define Discretionary Fiscal Policy- Congress creates a new bill that is designed to change AD through government spending or taxation. Define Non-Discretionary Fiscal Policy- Permanent spending or taxation laws enacted to work counter cyclically to stabilize the economy				
Three Ranges of the Aggregate Supply Curve		Government Spending and Taxation				
Draw and label the three ranges of the AS curve 		Expansionary Fiscal Policy- Laws to increase output 1. Increase Government Spending 2. Decrease Taxes (Increases disposable income) Contractionary Fiscal Policy- Laws to reduce inflation 1. Decrease Government Spending 2. Increase Taxes (Decreases disposable income)				
The Multiplier Effect		What is the Multiplier Effect? The idea that an initial change in spending will set off a spending chain that is magnified in the economy. The strength of multiplier depends on the amount that consumers spend of new income.				
<table border="1" style="width: 100%; text-align: center;"> <tr> <th>Simple Spending Multiplier</th> <th>Real GDP</th> </tr> <tr> <td>$\frac{1}{MPS}$ OR $\frac{1}{1 - MPC}$</td> <td>$\frac{MPC}{MPS}$</td> </tr> </table>		Simple Spending Multiplier	Real GDP	$\frac{1}{MPS}$ OR $\frac{1}{1 - MPC}$	$\frac{MPC}{MPS}$	Define Marginal Propensity to Consume (MPC)- How much people consume rather than save when there is a change in income Define Marginal Propensity to Save (MPS)- How much people save rather than consume when there is a change in income
Simple Spending Multiplier	Real GDP					
$\frac{1}{MPS}$ OR $\frac{1}{1 - MPC}$	$\frac{MPC}{MPS}$					
Policy and Multiplier Practice						
		1. Is there a recessionary or inflationary gap? Recessionary 2. If the government does no policy and resource prices are flexible, in the long run wages will <u>fall</u> and aggregate supply will <u>increase</u> 3. If fiscal policy is used to close they gap the government could <u>increase</u> spending or <u>decrease</u> taxes on consumers Assume the MPC is .5: (multiplier is 2) 4. What is the least amount of government spending that could potentially close the gap? \$20 billion 5. How much could the government cut taxes to close the gap? \$40 billion tax cut (consumers only spend half) Now assume that the MPC is .8: (multiplier is 5) 6. What is the least amount of government spending that could potentially close the gap? \$8 billion				
Problem with Fiscal Policy		Inflationary Expectations				
1. Deficit Spending-if the government increases spending without increasing taxes they will increase the annual deficit and the national debt 2. Time Lags-Congress takes time to write, debate, pass, and implement legislation 3. Crowding out- Government spending might cause unintended effects that weaken the impact of the policy. Ex: deficit spending to increase AD would increase interest rates and decrease investment		What happens to aggregate supply when people expect inflation? If people expect inflation, workers will seek higher wages and costs for businesses will increase. This causes the aggregate supply to decrease				

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Short Run and Long Run Phillips Curve

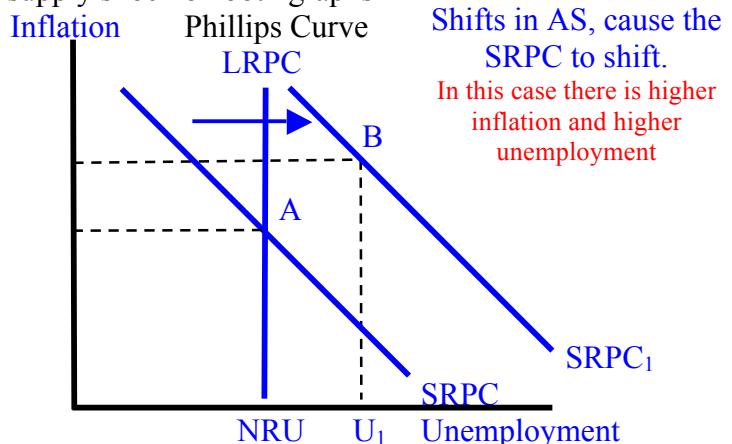
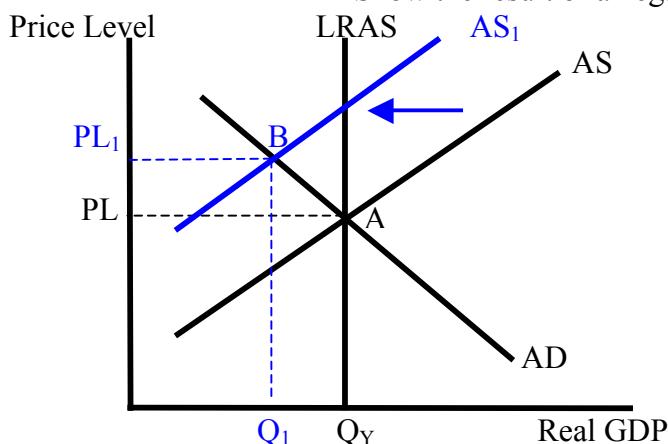
Draw and label the short and long run Phillips curve.

Label points A, B, and C based on the changes in AD



Draw and label the short and long run Phillips curve and label point A.

Show the result of a negative supply shock on both graphs



Economic Growth Practice

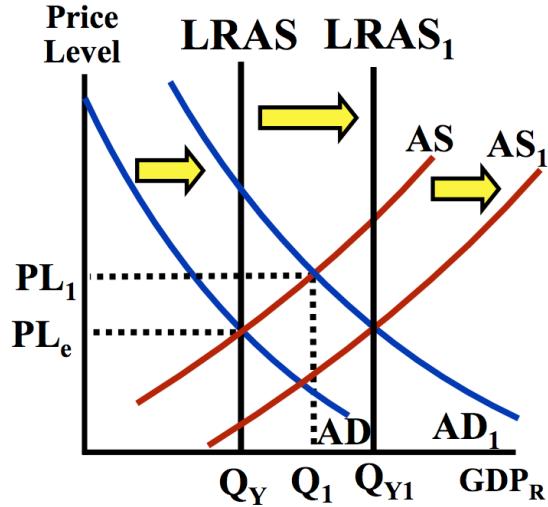
1. If interest rates fall, investment \uparrow causing capital stock to \uparrow and economic growth to \uparrow .
2. If interest rates go up, investment \downarrow causing capital stock to \downarrow and economic growth to \downarrow .

True or False

3. An increase in consumer spending leads to more economic growth in the long run. **False**
4. Crowding out due to deficit spending causes less economic growth. **True**
5. When the long run aggregate supply shifts right the natural rate of unemployment increases. **False**
6. A sustained increase in productivity causes both the long run aggregate supply curve and production possibilities curve to shift right. **True**
7. Jacob Clifford is very attractive. **Very True ☺**

Showing Economic Growth with AD and AS

Draw an economy at full employment. Show what happens in the long run if investment increases



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Unit 4: The Financial Sector, Money, and Monetary Policy

Define Key Terms	The Three Functions of Money
<p>The Financial Sector- The part of the economy made up of institutions (like banks) that focus on pairing lenders and borrowers</p> <p>Assets- Any item of economic value that can be converted into cash. Something owned</p> <p>Liabilities- A legal or financial obligation that must be paid back.</p> <p>Something owed</p> <p>Liquidity- The ease in which an asset can be converted into medium of exchange. Cash and money in checking accounts is very liquid. A car or a home is not</p>	<ol style="list-style-type: none"> 1. A Medium of Exchange- Money can easily be used to buy goods and services. Don't have to barter 2. A Unit of Account- Money measures the value of goods and services and measures value 3. A Store of Value-Money allows you to store purchasing power for the future <p>Types of Money</p> <ol style="list-style-type: none"> 1. Commodity Money Something that performs the function of money and has an alternative use (ex: mackerel in prison) 2. Fiat Money Something used for exchange but has no other important use (ex: \$20 dollar bill)
The Demand for Money	The Money Market Graph
<p>What is the transaction demand for money? People demand money to make everyday purchases. This is not affected by the interest rate</p> <p>What is the asset demand for money? When people demand money as a liquid asset because they prefer it to other non-liquid assets like bonds</p> <p>Interest rate ↑, the quantity of money demanded ↓ Interest rate ↓, the quantity of money demanded ↑</p>	<p>Draw the demand and supply of money and label the equilibrium nominal interest rate</p> <p>Nominal Interest Rate Money Supply</p> <p>ir</p> <p>Money Demand</p> <p>Q_{Money} Quantity of Money</p>
Shifters of Money Demand	
<ol style="list-style-type: none"> 1. Changes in price level- Inflation requires consumer to hold more cash for financial transactions. 2. Changes income- Sustained economic growth in the economy leads to a increase in the demand for money 3. Changes in taxation that affects personal investment- Government policies such as changing the capital gains tax would change the demand for money 	
Shifters of Money Supply	Money Market Practice
<ol style="list-style-type: none"> 1. Reserve ratio-the the percent of deposits that banks must hold in reserve (the % they can NOT loan out) -To increase money supply, decrease the reserve ratio -To decrease money supply, increase the reserve ratio 2. Discount Rate- the interest rate that the FED charges commercial banks -To increase money supply, decrease the discount rate -To decrease money supply, increase the discount rate 3. Open Market Operations- when the FED buys or sells government bonds (securities) -To increase money supply, the FED buys bonds -To decrease money supply, the FED sells bonds 	<ol style="list-style-type: none"> 1. Unexpected inflation causes the demand for money to <u>increase</u> and the interest rate to <u>increase</u>. 2. If the supply of money increased, the interest rate will <u>decrease</u> and investment will <u>increase</u>. <p>True or False</p> <ol style="list-style-type: none"> 3. When the interest rate is high, the opportunity cost of holding money increases so the quantity of money demanded will decrease. True 4. The money supply includes all assets like cash, demand deposits, bonds, and real estate. False 5. Monetary policy is when the central banks changes the interest rates by changing the money supply True

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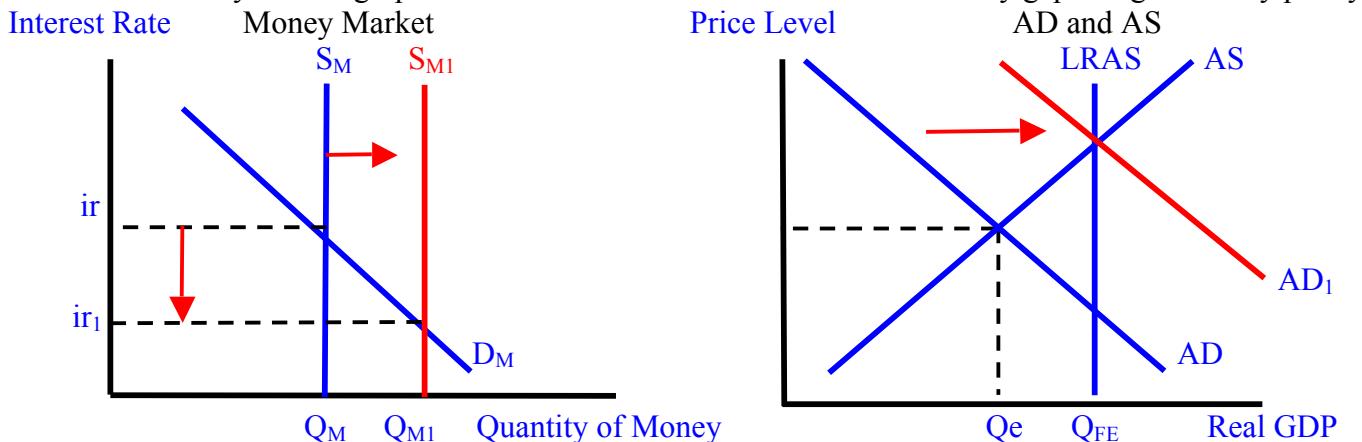
The Federal Reserve (The Fed)	Money Multiplier Equation										
What is the Federal Reserve and what does it do? The Fed is the central bank of the United States and it regulates commercial banks and adjusts the money supply to adjust interest rates to meet economic goals. This is called Monetary Policy.	1 Reserve Requirement										
Money Multiplier Practice	Shifter Practice										
<p>1. Assume the reserve requirement is .10. If the Fed buys \$10 billion worth of bonds the money supply will <u>increase</u> by <u>\$100</u> billion.</p> <p>2. Assume the reserve requirement is .20. If the Fed sells \$10 billion worth of bonds the money supply will <u>decrease</u> by <u>\$50</u> billion.</p> <p>3. Assume the reserve requirement is .10. If the Fed buys \$5 billion worth of bonds the money supply will <u>increase</u> by <u>\$50</u> billion.</p> <p>4. Assume the reserve requirement is .50. If the Fed sells \$5 billion worth of bonds the money supply will <u>decrease</u> by <u>\$10</u> billion.</p> <p>5. Assume the reserve requirement is .25. If the Fed sells \$2 billion worth of bonds the money supply will <u>decrease</u> by <u>\$8</u> billion.</p>	<p>1. If the FED increases the reserve requirement the money supply will \downarrow and interest rates \uparrow.</p> <p>2. If the FED sells bonds the money supply will \downarrow interest rates \uparrow, and investment \downarrow.</p> <p>3. If the FED decreases the reserve requirement the money supply will \uparrow and interest rates \downarrow.</p> <p>4. If the FED decreases the discount rate, the money supply will \uparrow and interest rates \downarrow.</p> <p>5. If the FED buys bonds the money supply will \uparrow interest rates \downarrow, and investment \uparrow.</p>										
Federal Funds Rate	Federal Funds Rate- The federal funds rate is the interest rate that banks charge each other for loans. The Fed uses open market operations to hit this target rate.										
Bonds	Interest Rates and Inflation										
<p>What is maturity? A borrower issues a bond that must be paid back by a certain amount of time. That time is its maturity. A bond can be sold early at an agreed upon price.</p> <p>If the interest rate increases, bond prices will \downarrow If the interest rate decreases, bond prices will \uparrow</p>	<p>1. If the nominal interest rate is 7% and expected inflation is 3%, what is the real interest rate? 4%</p> <p>2. If the real interest rate is -2% and the nominal interest rate was 3%, what was the inflation rate? 5%</p> <p>Real interest rate = nominal rate - expected inflation Nominal interest rate = real rate + expected inflation</p>										
Bank Balance Sheets											
<p>Define Fractional Reserve Banking- Process where banks hold a portion of deposits in reserve and loan the rest of the money out</p> <p>Define Excess Reserves- The amount banks are legally free to loan out. Excess reserves and required reserves make up total reserves</p>	<p>Define Demand Deposits- Bank deposits that can be withdrawn at any time (ex: checking accounts)</p> <p>Define Owner's Equity- The amount of money owners have put into a company or bank. It doesn't need to be held in reserve</p>										
<p>1. If the reserve requirement is .1 (or 10%) how much is this bank's required reserves and excess reserves? Req = \$2,000 Excess = \$3,000</p> <p>2. What is the maximum possible increase in the money supply if the bank loaned out all its excess reserves? \$30,000 (\$3,000 x 10)</p> <p>3. Assume a customer deposits \$5,000 into this bank, what is the initial change in the money supply? There is no initial change</p> <p>4. If the \$5,000 deposit is placed in reserve, how much is demand deposits and excess reserves? Demand deposits = \$25,000 Excess = \$7,500</p>	<p>Use the bank balance sheet to answer the questions</p> <table border="1"> <thead> <tr> <th>Assets</th><th>Liabilities</th></tr> </thead> <tbody> <tr> <td>Loans \$15,000</td><td>Demand Deposits \$20,000</td></tr> <tr> <td>Total Reserves \$5,000</td><td>Owner's Equity \$10,000</td></tr> <tr> <td>Treasury Bonds \$10,000</td><td></td></tr> <tr> <td>Total \$30,000</td><td>Total \$30,000</td></tr> </tbody> </table> <p>5. Assume a customer withdraws \$15,000. Identify three options this bank has to avoid defaulting other than asking borrowers to pay back loans. They can sell treasury bonds, borrow money from the Fed, or borrow money from another bank</p>	Assets	Liabilities	Loans \$15,000	Demand Deposits \$20,000	Total Reserves \$5,000	Owner's Equity \$10,000	Treasury Bonds \$10,000		Total \$30,000	Total \$30,000
Assets	Liabilities										
Loans \$15,000	Demand Deposits \$20,000										
Total Reserves \$5,000	Owner's Equity \$10,000										
Treasury Bonds \$10,000											
Total \$30,000	Total \$30,000										

If your friend gave you this packet, they are a jerk...and a thief. Don't be their friend

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Monetary Policy and AD/AS

Draw and label both graphs and show the economy in a recession.

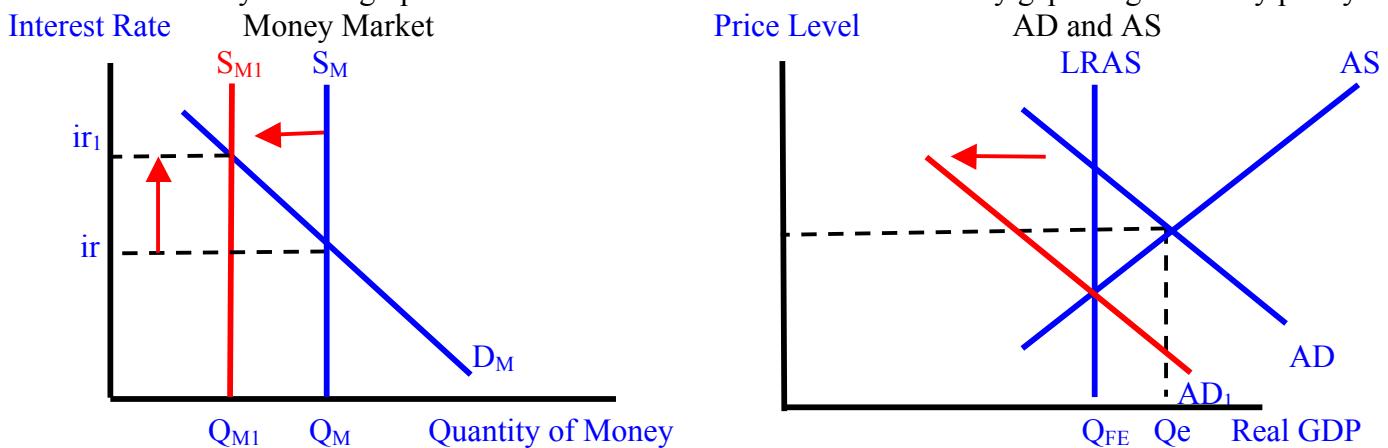
Use the money market graph to show how the FED closes the recessionary gap using monetary policy



Use arrows to explain the process: $S_M \uparrow \rightarrow ir \downarrow \rightarrow I \uparrow$ and $C \uparrow \rightarrow AD \uparrow \rightarrow$ Full Employment

Draw and label both graphs and show the economy with an inflationary gap.

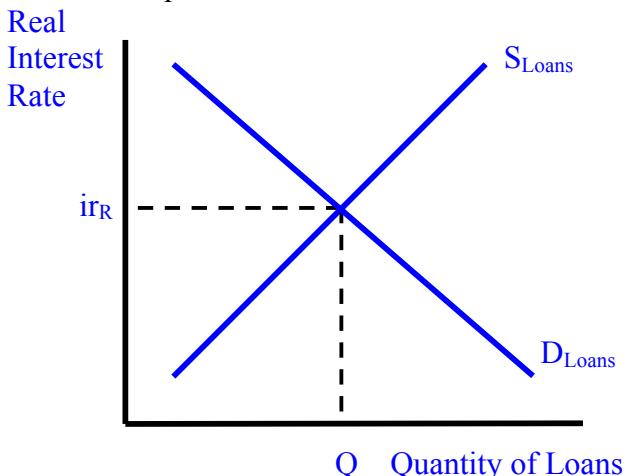
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Use arrows to explain the process: $S_M \downarrow \rightarrow ir \uparrow \rightarrow I \downarrow$ and $C \downarrow \rightarrow AD \downarrow \rightarrow$ Full Employment

The Loanable Funds Market

Draw the loanable funds market and label the equilibrium real interest rate



Shifters of Demand for Loanable Funds

1. Changes in perceived business opportunities
2. Changes in government borrowing

Shifters of Supply for Loanable Funds

1. Changes in private savings behavior
2. Changes in public savings
3. Changes in foreign personal investment
4. Changes in expected profitability

Loanable Funds Practice

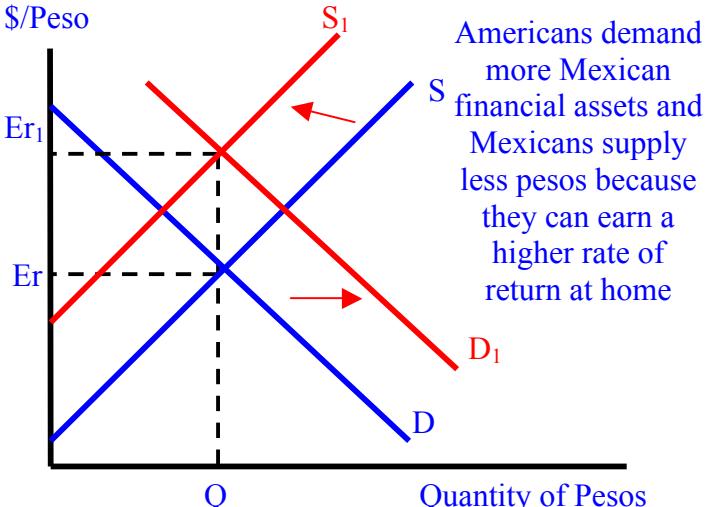
1. What happens to the real interest rate if the government runs a deficit? Demand increases so interest rate increase
2. If lenders decide to lend less, real interest rates \uparrow , investment \downarrow , and economic growth \downarrow
3. An increase in savings would cause real interest rates to \downarrow , investment \uparrow , and economic growth \uparrow

Seriously, Thank you!

Unit 5: International Trade

Key Terms	Balance of Payments
<p>Exports- the sale of goods and service created by domestic producers and sold to foreigners</p> <p>Imports- the purchase of goods and service created by foreigners</p> <p>Net Exports (X_N)- Exports – Imports. The difference between a nation's exports of goods and services and its imports of goods and services</p> <p>Trade Deficit- Exporting less than is imported (aka.trade gap)</p> <p>Trade Surplus-Exporting more than is imported. China has a huge trade surplus with the US.</p>	<p>What is the Balance of Payments?</p> <p>Summary of all international transactions within a given year prepared in the domestic country's currency. It has two accounts, the current account and the financial account.</p> <p>What is the Current Account?</p> <p>Measures the international trade in goods and services, investment income, and net transfer payments.</p> <p>What is the Financial Account?</p> <p>Measures the international trade of financial assets like stocks, bonds, and real estate.</p>
Interest Rates and Capital Flows	Balance of Payments Practice
<p>Net Capital Flow-</p> <p>The difference between the amount of money coming into a country to buy domestic assets and the amount of money leaving a country to buy foreign assets.</p> <p>What is the difference between capital inflows and capital outflows?</p> <p>Inflows looks at money coming into the country to buy domestic assets and outflows looks at money going out of the country to buy foreign assets</p> <p>Interest rate ↑, the capital inflows <u>↑</u></p> <p>Interest rate ↓, the capital inflows <u>↓</u></p> <p>Interest rate ↑, the capital outflows <u>↓</u></p> <p>Interest rate ↓, the capital outflows <u>↑</u></p>	<p>Identify if the example would be included in the current account or the financial account for the US</p> <ol style="list-style-type: none"> 1. A US company sells ten jets in Canada Current 2. An American company buys a beach resort in Mexico Financial 3. A Chinese company sells toys in the US Current 4. An American on vacation buys Japanese government bonds Financial 5. An immigrant living in the US sends his earning to his family overseas Current (called remittance) 6. An American company produces and sells cars in the US Neither 7. An Italian tourists buys souvenirs in the US Current
The Foreign Exchange Market	Currency Valuation
<p>Draw the foreign exchange market for US dollars (\$) relative to Japanese Yen (¥)</p> <p>Americans supply more dollars to get yen. The dollar depreciates</p> <p>Show on the graph what happens to the value of the dollar if American want more Japanese products</p>	<p>Define Appreciation- The increase of value of a country's currency relative to a foreign currency</p> <p>Define Depreciation- The decrease of value of a country's currency relative to a foreign currency</p> <p>FOREX Shifters</p> <ol style="list-style-type: none"> 1. Changes in Tastes- Ex: British tourists flock to the U.S 2. Changes in Relative Incomes (Resulting in more imports)- Ex: US growth increase US incomes 3. Changes in Relative Price Level (Resulting in more imports)- Ex: US prices increase relative to Britain 4. Changes in relative Interest Rates- Ex: If the US has a higher interest rate than Britain.

If your friend gave this to you, they are a jerk

Interest Rates and Foreign Exchange	Appreciation and Depreciation Practice
<p>Draw the foreign exchange market for Mexican Pesos. Show what happens to the value of pesos relative to the US dollar if interest rates in Mexico increase</p>  <p>Americans demand more Mexican financial assets and Mexicans supply less pesos because they can earn a higher rate of return at home</p>	<ol style="list-style-type: none"> If American tourists increase visits to Japan, the supply of US dollars will <u>increase</u> and the demand for Japanese yen will <u>increase</u>. The dollar will <u>depreciate</u> and the yen will <u>appreciate</u>. If the US government significantly decreases personal income taxes, the dollar will <u>depreciate</u> and the yen will <u>appreciate</u>. If inflation in the Japan rises significantly faster than in the US, the dollar will <u>appreciate</u> and the yen will <u>depreciate</u>. If Japan has a large budget deficit that increases Japanese interest rates, the dollar will <u>depreciate</u> and the yen will <u>appreciate</u>. If Japan places high tariffs on all US imports, the dollar will <u>depreciate</u> and the yen will <u>appreciate</u>. The US suffers a larger recession the dollar will <u>appreciate</u> and the yen will <u>depreciate</u>.
Foreign Exchange and Net Exports	Exchange Rate Regimes
<p>If a country's currency appreciates, net exports <u>↓</u> If a country's currency depreciates, net exports <u>↑</u> 1. The US dollar will appreciate relative to another currency if demand for the dollar <u>increases</u> or if supply <u>decreases</u>. This will cause US exports to <u>decrease</u> and imports to <u>increase</u>. 2. The US dollar will depreciate relative to another currency if demand for the dollar <u>decreases</u> or if supply <u>increases</u>. This will cause US exports to <u>increase</u> and imports to <u>decrease</u>.</p>	<p>What are floating exchange rates? The value of a currency can fluctuate according to the market and is not manipulated by the government What are fixed exchange rates? When the value of a currency is manipulated by the government to keep it at a specific level How does a government fix, or peg, its exchange rate? If the government wants to keep their currency depreciated to promote trade, they buy other currencies to increase the supply of their currency</p>

Congratulation! You are done with macroeconomics

MACROECONOMICS
Practice Exam #1

- 1 The central problem in economics is
 - (A) promoting economic growth.
 - (B) ensuring stable prices; limiting inflation
 - (C) promoting private ownership and protection of private property rights.
 - (D) scarcity; the use of limited resources.
 - (E) limiting unemployment.
- 2 Stagflation is the result of which of the following shifts in the AD/AS model?
 - (A) The aggregate demand curve shifting to the left
 - (B) The aggregate demand curve shifting to the right
 - (C) The aggregate supply curve shifting to the left
 - (D) The aggregate supply curve shifting to the right
 - (E) The long run aggregate supply curve shifting to the left
- 3 The natural rate of unemployment is
 - (A) The number of unemployed divided by the labor force
 - (B) The rate of unemployment when there is no frictional unemployment
 - (C) The rate of unemployment when the economy is in long run equilibrium
 - (D) The labor force divided by the working-age non-institutionalized population
 - (E) The rate of unemployment when the price level meets the Federal Reserve target for inflation
- 4 Skip this question. If your teacher gave this exam to you but he/she didn't buy a class set of Clifford's Ultimate Review Packet then you
 - (A) should tell your teacher that they are decreasing GDP and economic growth
 - (B) should cheat since your teacher is clearly a cheater
 - (C) yell "my econ teacher doesn't get econ!"
 - (D) remind your teacher to do the right thing
 - (E) should do all of the above
- 4 An increase in the expected rate of inflation is most likely to cause which of the following changes in the Phillips curve?
 - (A) a move downward to a new point along the short run Phillips curve
 - (B) a move upward to a new point along the short run Phillips curve
 - (C) a shift of the long run Phillips curve to the right
 - (D) a shift of the entire short run Phillips curve to the left
 - (E) a shift of the entire short run Phillips curve to the right
- 5 If foreign investors purchase U.S. government treasury bills, those purchases will be included in their nation's
 - (A) balance of trade
 - (B) current account
 - (C) financial account
 - (D) gini coefficient
 - (E) net cash transfers
- 6 A rightward shift in the aggregate demand curve could most likely be caused by which of the following?
 - (A) a decrease in consumer confidence
 - (B) a decrease in investment spending
 - (C) an increase in the price level
 - (D) the purchase of government securities by the central bank
 - (E) an increase in personal income taxes
- 7 If nominal wages and prices are not flexible, which of the following must be true when the economy has a severe recessionary gap?
 - (A) The aggregate demand curve is vertical
 - (B) The aggregate demand curve is horizontal
 - (C) The short run aggregate supply curve is vertical
 - (D) The short run aggregate supply curve is upward sloping
 - (E) The short run aggregate supply curve is horizontal

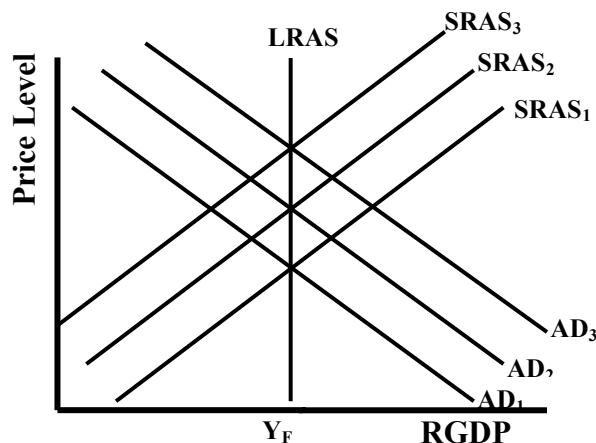
- 8 Which of the following groups would benefit in the short run from an unanticipated rise in the inflation rate?
- Retirees on a fixed income
 - Young people repaying fixed-interest-rate student loans
 - Union workers whose contracts do not include a cost-of-living-adjustment (COLA)
 - Homeowners with adjustable mortgage rate loans from banks
 - Financial institutions that have more fixed interest outstanding loans than adjustable rate loans on their books
- 9 What must be true if a nation's economy is operating inside of its production possibilities curve?
- The nation is utilizing all resources as efficiently as possible
 - The nation currently lacks the resources and technology to operate at a point on the production possibilities curve
 - The nation is using resources and technology inefficiently
 - The nation must increase investment spending on capital stock to produce on the curve
 - The nation's nominal gross domestic product is growing at a faster rate than real gross domestic product
- 10 Which of the following is most likely to improve an economy's productivity?
- Positive net capital stock investment
 - A decrease in cyclical unemployment
 - An increase in government discretionary expenditures
 - An increase in paid maternity leave
 - An increase in the velocity of money
- 11 If the aggregate supply curve is upward sloping and there is an increase in exports to foreign countries, what will be the resulting change in real gross domestic product (RGDP) and price level in the short run?
- | | <u>RGDP</u> | <u>Price Level</u> |
|-----|-------------|--------------------|
| (A) | Increase | Decrease |
| (B) | Increase | Increase |
| (C) | Unchanged | Increase |
| (D) | Decrease | Decrease |
| (E) | Decrease | Increase |
- 12 What will happen to the equilibrium price and equilibrium quantity of a good if there is a simultaneous increase in input costs while the product is gaining popularity among consumers?
- | | <u>Equilibrium Price</u> | <u>Equilibrium Quantity</u> |
|-----|--------------------------|-----------------------------|
| (A) | Increase | Increase |
| (B) | Increase | Indeterminate |
| (C) | Increase | Decrease |
| (D) | Decrease | Increase |
| (E) | Decrease | Decrease |
- 13 Which of the following is true of the short run Phillips curve, but not true for the long run Phillips curve?
- There is a tradeoff between the unemployment rate and the inflation rate
 - It is vertical at the natural rate of unemployment
 - It is upward sloping
 - There is not a tradeoff between the unemployment rate and the inflation rate
 - Shifts of the curve are the result of a change in aggregate demand

- 14 Which of the following groups would most likely be hurt by the depreciation of the Canadian dollar in the international market?
- (A) Canadian banks holding large amounts of foreign currencies
 - (B) Canadian lumber producers who sell to firms in other nations
 - (C) Europeans planning on traveling in Canada for their vacations
 - (D) Retired Americans living in Canada on their US government pensions
 - (E) Swiss ski manufacturers that market their products in Canada
- 15 Which of the following would cause an inward shift of the production possibilities curve?
- (A) A decrease in real interest rates
 - (B) An increase in personal income taxes
 - (C) A decrease in the price level
 - (D) A decrease in the size of the labor force
 - (E) An increase in unemployment related to a recessionary gap
- 16 If the reserve requirement increases from 5 percent to 10 percent, and assuming the general public holds a portion of its money in cash, what will happen to the money multiplier and the money supply?
- | | |
|-------------------------|------------------------------|
| <u>Money Multiplier</u> | <u>Money Supply</u> |
| (A) Increase | Increase by double |
| (B) Increase | Increase by less than double |
| (C) Decrease | Decrease by more than half |
| (D) Decrease | Decrease by half |
| (E) Decrease | Decrease by less than half |
- 17 The short run aggregate supply curve would shift to the left in response to which of the following?
- (A) An increase in net capital stock
 - (B) A decrease in the corporate income tax rate
 - (C) An increase in sovereign debt
 - (D) A decrease in the price level
 - (E) An increase in the cost of resources
- 18 If a country is experiencing a significant recessionary gap, which of the following combinations of fiscal and monetary policies would be most likely to move the nation toward long-run equilibrium?
- | <u>Fiscal Policy</u> | <u>Monetary Policy</u> |
|----------------------------------|---|
| (A) Increase taxes | Increase the federal funds rate |
| (B) Decrease taxes | Sell government securities in the open market |
| (C) Decrease Government spending | No change in the money supply |
| (D) Increase Government spending | Buy government securities in the open market |
| (E) Decrease Government spending | Sell government securities in the open market |
- 19 Which of the following best defines investment as a component of GDP?
- (A) Real estate acquisitions made for future resale profit
 - (B) Buying new plants, machinery, tools and inventory
 - (C) Capital gains periodically paid out to stockholders
 - (D) The difference between an individual's total income, wages plus interest, profits and rents, and their disposable income
 - (E) The purchase of stocks and bonds by private citizens
- 20 Which of the following is a reason why one nation's economic growth rate might be higher than another nation?
- (A) A lower labor force participation rate
 - (B) A lower age of retirement
 - (C) Larger per capita government subsidies for education and worker training programs
 - (D) Increased corporate tax rates
 - (E) Increased consumer spending

- 21 What will be the resulting change in Japan's aggregate supply and aggregate demand if the value of the Japanese yen increases in the foreign exchange market?
- | | <u>Aggregate Demand</u> | <u>Aggregate Supply</u> |
|-----|-------------------------|-------------------------|
| (A) | Increase | Increase |
| (B) | Increase | No change |
| (C) | No change | Increase |
| (D) | Decrease | No change |
| (E) | Decrease | Increase |
- 22 A decrease in which of the following might cause a decrease in real per capita income?
- (A) Inflation
 - (B) Output per unit of input
 - (C) Personal and corporate income tax rates
 - (D) The retirement age
 - (E) The real interest rate
- 23 Nations can benefit from free trade mainly because
- (A) It allows each nation to consume beyond its production possibilities curve.
 - (B) import tariffs can increase government revenues.
 - (C) income inequality will improve in both societies.
 - (D) free trade fosters self-sufficiency for each nation.
 - (E) unemployment will decrease in each country.
- 24 The table below represents a simplified bank balance sheet, or T-Account, for a commercial bank. Use the information in the table to answer the following question.
- | <u>Assets</u> | <u>Liabilities</u> |
|-----------------------------|----------------------------|
| Required Reserves: \$10,000 | Demand Deposits: \$100,000 |
| Securities: \$30,000 | |
| Loans: \$50,000 | |
- Which of the following represents the required reserve ratio for this bank and the maximum amount of additional lending this bank can undertake?
- | <u>Required Reserve Ratio</u> | <u>Additional Loans</u> |
|-------------------------------|-------------------------|
| (A) 5% | \$5,000 |
| (B) 10% | \$10,000 |
| (C) 10% | \$20,000 |
| (D) 30% | \$70,000 |
| (E) 50% | \$50,000 |
- 25 Who demands the factors of production in the circular flow diagram?
- (A) Consumers
 - (B) Firms
 - (C) The foreign sector
 - (D) Financial institutions
 - (E) Households
- 26 Assume the government decreases its deficit spending. What is the likely result in the money market?
- | <u>Demand For Money</u> | <u>Nominal Interest Rates</u> |
|-------------------------|-------------------------------|
| (A) Decrease | Decrease |
| (B) Increase | Increase |
| (C) Decrease | Indeterminate |
| (D) Increase | Decrease |
| (E) Decrease | Increase |
- 27 Which of the following assets would be characterized as having the most liquidity?
- (A) an antique etruscan vase
 - (B) money market mutual funds
 - (C) stocks
 - (D) savings bonds
 - (E) paper currency

- 28 Which of the following is MOST likely to promote economic growth?
- (A) A decrease in business tax credits for investment spending
 - (B) A decrease in federal student education grants
 - (C) An increase in investment in tools and machinery
 - (D) A decrease in the labor force participation rate
 - (E) An increase in the real interest rate
- 29 Which of the following is *NOT* a criticism of gross domestic product (GDP) as a measure of a nation's well-being?
- (A) GDP measures only the value of final goods and services and not intermediate goods and services.
 - (B) GDP does not account for the negative impacts of economic growth, such as pollution.
 - (C) GDP does not account for non-market activities accomplished by individual economic actors for themselves.
 - (D) GDP does not account for inequitable distribution of income among the populace, resulting in wide discrepancies in living standards.
 - (E) Economic activities for which people are paid "under the table", or barter transactions, are not accounted for by GDP statistics.
- 30 The spending multiplier is the result of
- (A) tax revenues increase as consumer and business incomes increase.
 - (B) foreign purchasers increasing expenditures as the currency appreciates.
 - (C) government spending crowding out consumption and investment spending.
 - (D) domestic investment expenditures rising as interest rates rise.
 - (E) consumer expenditures rising as incomes rise.
- 31 In the midst of a \$300 billion recessionary gap, the federal government decides to use fiscal policy to bring the economy back to long run equilibrium. If society's marginal propensity to consume (MPC) is 0.80, which of the following could the government do to reach full employment assuming no crowding out or leakages?
- (A) Increase taxes by \$60 billion.
 - (B) Decrease taxes by \$300 billion.
 - (C) Increase government expenditures \$60 billion.
 - (D) Increase government expenditures by \$150 billion.
 - (E) Increase government expenditures by \$300 billion.
- 32 Which of the following is an example of cyclical unemployment?
- (A) Sue, who is unemployed, has stopped looking for a job.
 - (B) Juan has taken voluntary retirement from his job at an aerospace company.
 - (C) Zelda lost a job with the recent downturn in the economy.
 - (D) Jack lacks the skills to fill any of the available jobs.
 - (E) Robert quits his job to search for a better job.
- 33 Which of the following best describes the concept of inflation?
- (A) Appreciation of one currency relative to another currency
 - (B) An acceleration in interest rates
 - (C) A steady rise in the general level of prices
 - (D) Growth rate of real gross domestic product
 - (E) A rise in the unemployment rate
- 34 In the AS/AD model, which of the following shifts would be the likely result of an increase in personal income taxes?
- (A) Aggregate demand shifts to the right
 - (B) Aggregate demand shifts to the left
 - (C) Aggregate supply shifts to the right
 - (D) Aggregate supply shifts to the left
 - (E) Aggregate demand and aggregate supply both shift to the right

- 35 Which of the following policy combinations would foster long run growth of an economy without increasing the price level?
- | | |
|--|--|
| Monetary Policy
(A) Buy bonds
(B) Sell bonds
(C) Buy bonds
(D) Sell bonds
(E) Buy bonds | Fiscal Policy
Increase government spending
Increase government spending
Decrease government spending
Decrease government spending
Decrease income taxes |
|--|--|
- 36 If a country is experiencing a recessionary gap, which of the following fiscal and monetary policy combinations would be most likely to move the nation closer to full employment with a minimum change in interest rates?
- (A) A decrease in government spending and a decrease in taxes
 - (B) An increase in government spending and the purchase of bonds on the open market
 - (C) A decrease in taxes and an increase in the discount rate
 - (D) An increase in taxes and a decrease in the federal funds rate
 - (E) the sale of bonds on the open market and a decrease in government spending
- 37 The opportunity cost of holding money in the form of cash increases when
- (A) the velocity of money increases
 - (B) interest rates increase
 - (C) nominal wages decrease
 - (D) the price level falls
 - (E) aggregate demand decreases
- 38 If the economy is operating below full-employment output, assuming that wages and prices are flexible, long run equilibrium can be restored by which of the following?
- (A) Raising the fed funds rate
 - (B) Authorizing contractionary fiscal policy to increase aggregate demand
 - (C) Enacting no policy since lower wages will result in a return to full employment
 - (D) An open market sale of government bonds by the central bank
 - (E) Raising personal income taxes



- 39 In the graph above, assume wages and prices are perfectly flexible, and a starting equilibrium point of AD₂ and SRAS₂. If this economy experiences demand-pull inflation, identify both the short run and long run shifts in the aggregate demand and short run aggregate supply curves.

- | Short Run | Long Run |
|--|--|
| (A) AD ₂ to AD ₃ | SRAS ₂ to SRAS ₃ |
| (B) AD ₂ to AD ₁ | SRAS ₂ to SRAS ₁ |
| (C) AD ₂ to AD ₃ | SRAS ₁ to SRAS ₃ |
| (D) SRAS ₂ to SRAS ₁ | AD ₂ to AD ₁ |
| (E) SRAS ₂ to SRAS ₃ | AD ₂ to AD ₃ |

- 40 If an economy experiences an increase in net capital inflows by foreign investors, which of the following will be the resulting change in the market for loanable funds and the real interest rate?

	<u>Market for Loanable Funds</u>	<u>Real Interest Rate</u>
(A)	Decrease in supply	Decrease
(B)	Decrease in supply	Increase
(C)	Increase in supply	Decrease
(D)	Increase in demand	Increase
(E)	Decrease in demand	Decrease

- 41 According to rational expectations theory
- (A) People expect future inflation to be equal to the current year's inflation rate.
 - (B) Expected inflation often leads to actual inflation as individuals and businesses changes their behavior.
 - (C) People rationally wait to act on their expectations until government agencies formally report inflation statistics.
 - (D) People assume inflation will be stable.
 - (E) People assume inflation will rise and fall with the unemployment rate.

- 42 Assume that there is no unanticipated inflation and that wages and prices are flexible. What will happen to short run real gross domestic product (RGDP) and the price level in the long run if the Federal Reserve purchases government securities in the open market?

	<u>RGDP</u>	<u>Price Level</u>
(A)	Decrease	Decrease
(B)	No change	Increase
(C)	No change	Decrease
(D)	Increase	No change
(E)	Increase	Increase

- 43 A contractionary monetary policy will have what effect on aggregate demand, price level and real output?

	<u>Aggregate Demand</u>	<u>Price Level</u>	<u>Real Output</u>
(A)	Increase	Increase	Increase
(B)	Increase	Increase	Decrease
(C)	Decrease	Decrease	Decrease
(D)	Decrease	Increase	Increase
(E)	Decrease	Decrease	Increase

- 44 What is likely to happen to the value of the Mexican Peso and capital flow in Mexico if there is an increase in real interest rates in Mexico relative to real interest rates in the rest of the world?

	<u>Capital Flow</u>	<u>Value of the Peso</u>
(A)	Outflow	Appreciate
(B)	Inflow	Appreciate
(C)	Inflow	No Change
(D)	Outflow	Depreciate
(E)	Inflow	Depreciate

- 45 Answer the questions using the chart below illustrating disposable income and consumption. Assume the marginal propensity to consume is 0.80.

<u>Disposable Income</u>	<u>Consumption</u>
\$1,500	\$1,510
\$1,550	\$1,550
\$1,600	\$1,590
\$1,650	\$1,630
\$1,700	\$1,670

At what disposable income does dissaving occur?

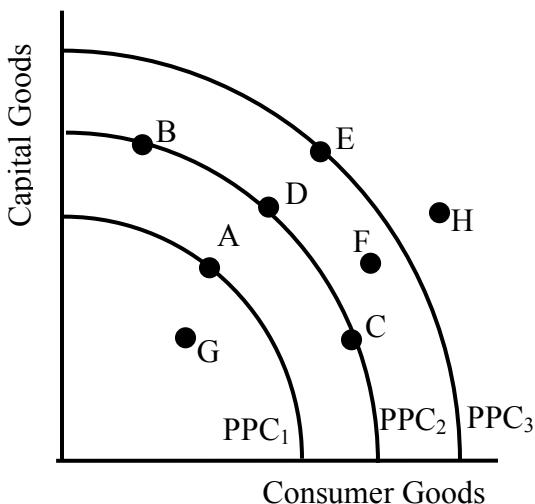
- (A) \$1,500
- (B) \$1,550
- (C) \$1,600
- (D) \$1,650
- (E) \$1,700

- 46 In an economy is at full employment with a vertical aggregate supply curve and aggregate demand is continuing to increase, which of the following monetary policy actions would be an appropriate response?

- (A) Decreasing the fed funds rate
- (B) Increasing government spending
- (C) Purchasing government securities in the open market
- (D) Decreasing the required reserve ratio
- (E) Selling government securities in the open market

- 47 Assume a recession causes jobless workers to grow more discouraged and give up their search for work. What will be the resulting change in the labor force participation rate and unemployment rate?
- | <u>Labor Force
Participation Rate</u> | <u>Unemployment
Rate</u> |
|---|------------------------------|
| (A) Increase | Decrease |
| (B) No change | Increase |
| (C) Decrease | Increase |
| (D) No change | Decrease |
| (E) Decrease | Decrease |
- 48 A country's currency might appreciate in value because of which of the following?
- (A) A higher price level relative to the rest of the world
 - (B) A higher real interest rate relative to the rest of the world
 - (C) Decreased demand for the country's currency
 - (D) Increased supply of the country's currency on the world market
 - (E) A purchase of government bonds in the open market by the nation's central bank
- 49 Which of the following is most likely to cause an increase in potential gross domestic product?
- (A) An increase in the fed funds rate
 - (B) A decrease in cyclical unemployment
 - (C) An increase in government expenditures on infrastructure projects
 - (D) An increase in inflationary expectations
 - (E) Negative net capital investment
- 50 If the U.S. Federal Reserve engages in expansionary monetary policy by purchasing government securities through the open market, what will be the likely result on the nominal interest rate, aggregate demand and the unemployment rate?
- | <u>Nominal
Interest Rate</u> | <u>Aggregate
Demand</u> | <u>Unemployment
Rate</u> |
|----------------------------------|-----------------------------|------------------------------|
| (A) Decrease | Decrease | Decrease |
| (B) Decrease | Increase | Decrease |
| (C) Decrease | No change | Increase |
| (D) Increase | Increase | Increase |
| (E) Increase | Decrease | Increase |
- 51 A decrease in government deficit spending will have which of the following effects in the short term?
- (A) Increase net exports
 - (B) Decrease nominal interest rates
 - (C) Increase nominal interest rates
 - (D) Increase the price level
 - (E) Decrease unemployment
- 52 If the federal government taxes all income at a flat rate of 20% and the marginal propensity to consume (MPC) is 0.75. If Daniel's gross income increases by \$1,000, how much will his consumption expenditures increase?
- (A) \$200
 - (B) \$600
 - (C) \$750
 - (D) \$800
 - (E) \$1,000
- 53 Given a required reserve ratio of 10% and banks loan out all of their excess reserves, if the Federal Reserve chooses to engage in contractionary monetary policy by selling \$1,000 of Treasury Bills to commercial banks, what will be the resulting change in the money supply?
- (A) Decrease by \$1,000
 - (B) Decrease by \$9,000
 - (C) Decrease by \$10,000
 - (D) Increase by \$1,000
 - (E) Increase by \$1,000
- 54 Assume that the velocity of money is constant in the equation of exchange. Which of the following must be true if the GDP deflator is equal to 200 while the economy is operating with a vertical aggregate supply curve?
- (A) the money supply has doubled
 - (B) nominal interest rates have decreased by half
 - (C) the price level has decreased by half
 - (D) real output has increased by 100
 - (E) the unemployment rate has doubled

- 55 Country X can produce either 2 tons of corn or 4 scooters with 20 units of labor. Country Y can produce either 5 tons of corn or 25 scooters with 20 units of labor. Based on this information, which of the following is true.
- (A) Country X has an absolute advantage in the production of corn, while Country Y has a comparative advantage in the production of scooters.
- (B) Country X has an absolute advantage in the production of corn, while Country Y has a comparative advantage in the production of corn.
- (C) Country X has a comparative advantage in the production of corn, while Country Y has a comparative advantage in the production of scooters.
- (D) Country X has a comparative disadvantage in the production of both goods.
- (E) Trading 1 ton of corn for 8 scooters would benefit both countries.
- 56 Which of the following is the best example of structural unemployment?
- (A) A worker is laid off during a recession.
- (B) A worker voluntarily quits a job to go back to school.
- (C) A worker is replaced by machines that are cheaper and more productive.
- (D) A worker is denied on-the-job training.
- (E) A worker switches from working part-time to full-time.
- 57 If the country is currently operating at point D on PPC_2 , which of the following changes would foster future economic growth?
- (A) Shifting from PPC_2 to PPC_1
- (B) Moving from point D to point A
- (C) Moving from point D to point B
- (D) Moving from point D to point C
- (E) Moving from point D to point G
- 58 If the country is currently operating at point D on PPC_2 , which of the following changes would illustrate actual economic growth had occurred?
- (A) Shifting from PPC_2 to PPC_1
- (B) Shifting from PPC_2 to PPC_3
- (C) Moving from point D to point B
- (D) Moving from point D to point C
- (E) Moving from point D to point G
- 59 If the relative price level in Canada is higher than in Mexico, what is the likely result in the foreign exchange market?
- (A) A decrease in the supply of Canadian dollars
- (B) A depreciation of the Mexican peso
- (C) An appreciation of the Canadian dollar
- (D) A depreciation of the Canadian dollar
- (E) An increase in the supply of the Mexican peso
- 60 Assume that the nominal interest rate is 10 percent. If the expected inflation rate is 3 percent, the real interest rate is
- (A) 0.5%
- (B) 3%
- (C) 7%
- (D) 10%
- (E) 13%



<u>MACROECONOMICS</u>			
Practice Exam #1			
Q#	Ans.	Unit	Topic
1	D	1	Economics
2	C	3	Stagflation
3	C	2	Unemployment
4	E	3	Phillips Curve
5	C	5	Balance of Payments
6	D	4	Aggregate Demand
7	E	3	AD/AS
8	B	2	Inflation
9	C	1	Production Possibilities
10	A	2	Productivity
11	B	3	AD/AS
12	B	1	Demand and Supply
13	A	3	Phillips Curve
14	E	5	Foreign Exchange
15	D	1	Production Possibilities
16	E	4	Monetary Policy
17	E	3	AD/AS
18	D	4	Fiscal/Monetary Policy
19	B	2	Investment
20	C	2	Productivity/Growth
21	D	5	Foreign Exchange
22	B	2	Productivity
23	A	1	PPC and Trade
24	B	4	Bank Balance Sheet
25	B	1	Circular Flow
26	A	4	Money Market
27	E	4	Liquidity
28	C	3	Growth
29	A	2	GDP
30	E	3	Spending Multiplier

Q#	Ans.	Unit	Topic
31	C	3	Spending Multiplier
32	C	2	Unemployment
33	C	2	Inflation
34	B	3	AD/AS
35	C	4	Growth and Policy
36	B	4	Fiscal/Monetary Policy
37	B	4	Money Market
38	C	3	Fiscal Policy
39	A	3	Long Run and Policy
40	C	4	Loanable Funds
41	B	4	Rational Expectations
42	B	4	Open Market Operations
43	C	4	Monetary Policy
44	B	5	Foreign Exchange
45	A	3	Dissaving
46	E	4	Monetary Policy
47	E	2	Unemployment
48	B	5	Foreign Exchange
49	C	3	Growth
50	B	4	Monetary Policy
51	B	3	Deficit Spending
52	B	3	Marginal Propensity
53	C	4	Money Multiplier
54	A	4	Quantity Theory
55	C	1	Comparative Advantage
56	C	2	Unemployment
57	C	1	Production Possibilities
58	B	1	Production Possibilities
59	D	5	Foreign Exchange
60	C	3	Real vs. Nominal

Thank you for buying the Ultimate Review Packet and supporting ACDC Econ.

To watch a video of me going over each of these questions please go to:

<http://www.acdcecon.com/exams>

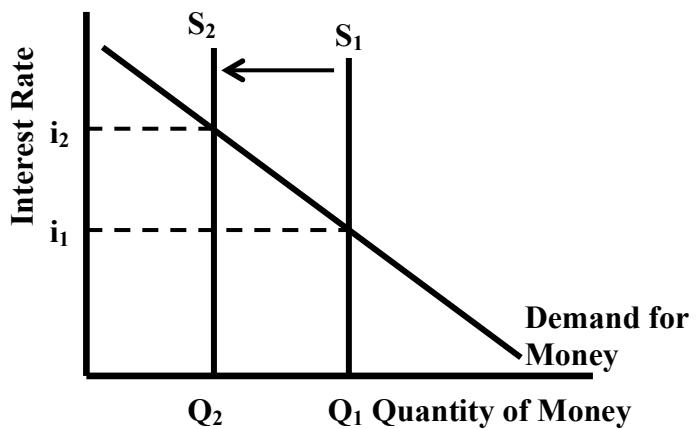
Jacob Clifford

Macroeconomics
Practice Exam #2

- 1 If a country's economy is currently operating inside of its production possibilities curve, what must be true?
- The country's resources are fully employed.
 - The country's resources are fully employed, but the labor force participation rate is less than 100%.
 - The country's resources are not fully employed.
 - The country's natural and capital resources are not fully employed, but human resources are fully employed.
 - Specialization and trade would not benefit the society.
- 2 When the U.S. Federal Reserve engages in open market operations it is
- increasing or decreasing the discount rate
 - buying or selling government securities
 - increasing or decreasing reserve requirements for member financial institutions
 - buying or selling stocks
 - engaging in check clearing operations for commercial banks
- 3 A leftward shift in the short-run aggregate supply curve could be the result of
- an increase in capital stock
 - a central bank sale of government securities
 - tax credits for capital investments
 - a decrease in personal income taxes
 - an increase in input prices
- 4 A decrease in which of the following is most likely to increase long run economic growth?
- Federal student loan programs
 - The money supply
 - Interest rates
 - The marginal propensity to save
 - Personal income tax rates
- 5 If disposable income is \$5,000 billion, personal taxes are \$1,000 billion, and the marginal propensity to consume (MPC) is 0.8, what is personal income equal to?
- \$6,000 billion
 - \$5,000 billion
 - \$4,800 billion
 - \$3,200 billion
 - \$2,200 billion
- 6 Given the production and price information listed in the table above, and assuming 2015 is the base year, calculate the Real Gross Domestic Product (RGDP) for 2016 and the GDP deflator for 2016.
- | | 2015
Prices | 2016
Output | 2016
Prices |
|---------|----------------|----------------|----------------|
| Pears | \$1.50 | 4 | \$2.50 |
| Apples | \$2 | 5 | \$2 |
| Oranges | \$8 | 3 | \$10 |
- | | <u>RGDP</u> | <u>Deflator</u> |
|-----|-------------|-----------------|
| (A) | \$ 24 | 60 |
| (B) | \$ 25 | 100 |
| (C) | \$ 40 | 125 |
| (D) | \$ 50 | 150 |
| (E) | \$ 60 | 175 |

- 7 In the equation of exchange, according to the quantity theory of money, the quantity of money and velocity of money are directly related to
- the value of production
 - the nominal interest rate
 - the unemployment rate
 - the reserve requirement
 - the rate of capital inflow
- 8 Which of the following would most likely result in cost-push inflation?
- A substantial decrease in consumption expenditures
 - A significant increase in union wages
 - Contractionary fiscal policy
 - Expansionary monetary policy
 - An appreciation of the country's currency
- 9 If society experiences an increase in human capital but nominal wages remain the same, what will happen to real gross domestic product (RGDP) and real wages?
- | | <u>RGDP</u> | <u>Real Wages</u> |
|-----|---------------|-------------------|
| (A) | Increase | Increase |
| (B) | Increase | Decrease |
| (C) | Indeterminate | Increase |
| (D) | Decrease | Decrease |
| (E) | Decrease | Increase |
- 10 Scarcity is the condition in which
- supplies of the four factors of production are relatively unlimited
 - capital stock does not depreciate
 - structural unemployment means the labor force is not fully utilized
 - human wants are beyond society's production
 - population and labor force are experiencing negative growth possibilities
- 11 Assuming the country is experiencing a recessionary gap, which of the following actions would the central bank most likely engage in?
- Sell bonds in open market operations and decrease personal income taxes
 - Increase the discount rate and decrease the reserve requirement
 - Sell bonds in open market operations and increase personal income taxes
 - Sell bonds in open market operations and increase the reserve requirement
 - Buy bonds in open market operations and decrease the discount rate
- 12 Which of the following will be the result of a decrease in input prices in the short run?
- | Aggregate
<u>Demand Curve</u> | Aggregate
<u>Supply Curve</u> |
|----------------------------------|----------------------------------|
| (A) Shift to the left | Shift to the left |
| (B) Shift to the right | Shift to the left |
| (C) Shift to the left | No change |
| (D) Shift to the right | Shift to the right |
| (E) No change | Shift to the right |
- 13 Assume the economy of the nation of Cliffland is operating short of full employment output and economists agree that it would take \$400 million dollars of additional spending to bring the economy to long run equilibrium. If the marginal propensity to consume is 0.75, what is the least amount of government spending that could bring the nation back to long run equilibrium?
- \$50 million
 - \$80 million
 - \$100 million
 - \$200 million
 - \$400 million

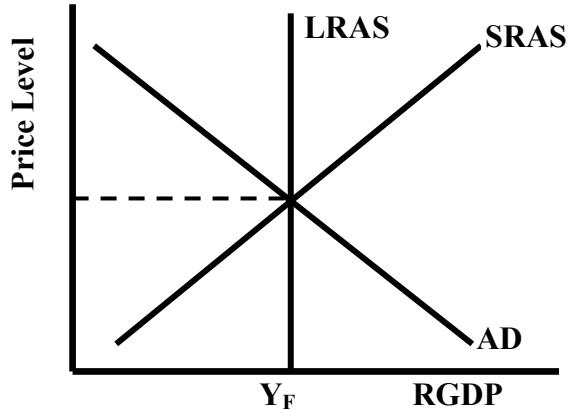
- 14 Which of the following is true regarding the consumer price index (CPI)
- The CPI measures the amount of imports purchased by domestic consumers
 - The CPI measures prices of all consumer goods and services produced in the economy
 - The CPI measures prices of selected raw materials purchased by businesses
 - The CPI measures prices of a specific market basket of goods and services purchased by consumers
 - The CPI measures changes in consumers' willingness to pay at different levels of inflation
- 15 A rise in a nation's real interest rate might be fueled by which of the following events?
- An increase in taxes on consumer goods
 - A decrease in government spending
 - A purchase of government bonds by the country's central bank
 - A perceived increase in the country's political and economic turmoil
 - An increase in the marginal propensity to save on the part of the country's citizens
- 15 Skip this question. Thank you for supporting ACDC Econ and buying the Ultimate Review Packet. Which of the following is the next course of action if someone posted this online or gave it to you for free?
- Explain to that person that preventing entrepreneurs from earning profit decreases their incentive to innovate
 - Remind them that no one wants to date people that have no sense of right or wrong.
 - Tell them that they are stealing from Mr. Clifford
 - Ask them politely to do the right thing
 - All of the above



- 16 Which of the following would cause the shift illustrated in the money market graph above?
- A decrease in the discount rate
 - A decrease in the required reserve ratio
 - A depreciating dollar causing an increase in the supply of dollars in foreign exchange markets
 - The Federal Reserve selling bonds on the open market
 - An increase in taxes on capital goods
- 17 Given a required reserve ratio of 0.10, suppose that Paula's bank has \$50,000 in demand deposits and has loaned out all of its excess reserves. If Paula withdraws \$2,000 from the bank how much does her bank need to increase its reserves to meet the reserve requirement?
- \$1,000
 - \$1,800
 - \$2,000
 - \$3,000
 - \$5,000
- 18 Which of the following is the best definition of disposable income?
- Income minus autonomous consumption
 - Nominal GDP minus net exports
 - Income minus tax liabilities
 - Income plus consumers spending
 - Income minus savings

- 19 Which of the following is an example of frictional unemployment?
- (A) A recent graduate, looking for their first job.
 - (B) A full-time laborer involuntarily switches to part-time
 - (C) A tradesperson is laid off as the economy moves into a recessionary gap
 - (D) A worker is replaced by computers at the office.
 - (E) An older employee who takes voluntary retirement
- 20 Which of the following characteristics best defines the free market system?
- (A) Scarcity and limited resources
 - (B) Private property and competition
 - (C) Private production of public goods
 - (D) Individuals that are motivated by self-interest
 - (E) A privately funded financial sector
- 21 If a nation's nominal gross domestic product (NGDP) increased by 6%, while its real rate of GDP growth (RGDP) was 2%, which of the following must be true?
- (A) The GDP deflator increased by 4%
 - (B) The GDP deflator decreased by 4%
 - (C) The inflation rate was 8%
 - (D) The inflation rate was 3%
 - (E) The GDP deflator increased by 3%
- 22 Workers who have lost their jobs because of technological improvements in the economy are said to be
- (A) cyclically unemployed.
 - (B) discouraged workers.
 - (C) frictionally unemployed.
 - (D) structurally unemployed.
 - (E) underemployed.
- 23 Which of the following changes in the short run aggregate supply curve and the aggregate demand curve would cause an increase in real gross domestic product without a corresponding increase in the price level?
- | Short Run
<u>Aggregate Supply</u> | Aggregate
<u>Demand</u> |
|--------------------------------------|----------------------------|
| (A) Decrease | Increase |
| (B) No Change | Increase |
| (C) Increase | No Change |
| (D) No Change | Decrease |
| (E) Decrease | No Change |
- 24 If a country imposes a tariff on a product which they produce as well as import, which of the following will most likely occur?
- (A) Employment in the domestic production of the product will increase
 - (B) Employment in the foreign production of the product will increase
 - (C) The domestic price of the product will decrease
 - (D) Domestic consumption of the product will increase
 - (E) Domestic production of the product will decrease
- 25 A country's national debt is defined as
- (A) the amount of money owed by the government to foreign nations.
 - (B) the amount of money owed to holders of government securities.
 - (C) the amount of money owed by a nation's citizens to the national government.
 - (D) the amount of currency in circulation that is not backed by gold.
 - (E) the amount of money owed by that nation to its trading partners.

- 26 Which of the following would be most likely to cause the long run output of an economy to decrease?
- Negative net capital stock investment
 - An increase in the labor force participation rate
 - The increase in nominal gross domestic product is greater than the increase in real gross domestic product
 - An increase in personal income taxes
 - An increase in the unemployment rate
- 27 Fiscal policy measures that work counter-cyclically without overt government action are known as
- non-discretionary fiscal policies
 - balanced budget multipliers
 - discretionary fiscal policies
 - open Market operations
 - self-correcting mechanisms for recessionary and inflationary gaps
- 28 Expansionary fiscal policy will have what effect on the short-run Phillips curve?
- a decrease in both unemployment and inflation
 - an increase in both unemployment and inflation
 - an increase in unemployment but no change in inflation
 - a decrease in inflation, coupled with an increase in unemployment
 - an increase in inflation, coupled with a decrease in unemployment
- 29 If James deposits \$1,000 cash in his checking account and the required reserve ratio is 0.10, what is the maximum resulting change in the money supply from his deposit?
- \$900
 - \$1,000
 - \$4,500
 - \$9,000
 - \$10,000
- 30 Good X and Good Y are substitutes. An increase in the price of Good Y will result in which of the following?
- A decrease in the price of Good X
 - A decrease in the supply of Good X
 - A decrease in the supply of Good Y
 - An increase in the demand for Good X
 - An increase in both the demand and the supply of Good X
- 31 Which of the following could decrease to cause the demand for money to fall?
- Long run aggregate supply
 - Short run aggregate supply
 - Interest rates
 - The money supply
 - Price level



- 32 In the graph above, economic growth could be illustrated by a
- leftward shift of the aggregate demand curve
 - rightward shift of the aggregate demand curve
 - rightward shift of the short-run aggregate supply curve
 - leftward shift of the long-run aggregate supply curve
 - rightward shift of the long-run aggregate supply curve

- 33 Crowding out is when government borrowing limits private investment by
 (A) decreasing the real interest rate
 (B) increasing the real interest rate
 (C) decreasing the supply of money
 (D) increasing the supply of money
 (E) decreasing wages
- 34 If a nation imports fewer goods and services than it exports, what must be true of that nation's balance of payments accounts?
 (A) The trade balance is in surplus
 (B) The financial account balance is in surplus
 (C) The financial account balance is in deficit
 (D) The current account balance is in surplus
 (E) The current account balance is in deficit
- 35 Full employment takes place when
 (A) the employment rate is equal to one-hundred percent.
 (B) the economy is experiencing structural and cyclical unemployment only.
 (C) the economy is experiencing structural unemployment only.
 (D) the economy is experiencing structural and frictional unemployment only.
 (E) the unemployment rate is equal to zero percent.
- 36 Which of the following would cause a nation's real output level at full employment to decrease?
 (A) New technology that enhances labor productivity
 (B) A sustained increase in resource costs
 (C) An increase in net investment in capital stock
 (D) An increase in the price level
 (E) A decrease in the price level
- 37 If the Federal Reserve engages in open market operations to buy government securities what will be the resulting change in the money supply, interest rates and bond prices?
- | <u>Money Supply</u> | <u>Interest Rates</u> | <u>Bond Prices</u> |
|---------------------|-----------------------|--------------------|
| (A) Increase | Increase | Increase |
| (B) Increase | Decrease | Increase |
| (C) Decrease | Increase | No Change |
| (D) Decrease | Increase | Decrease |
| (E) Decrease | Decrease | Decrease |
- 38 If the country of Alpha is experiencing an inflationary gap, which of the following monetary and fiscal policy combinations is most likely to move the nation toward long run equilibrium?
- | <u>Monetary Policy</u> | <u>Fiscal Policy</u> |
|--|------------------------------|
| (A) Buy securities on the open market | Decrease taxes |
| (B) Sell securities on the open market | Decrease spending |
| (C) Decrease the reserve requirement | Increase taxes |
| (D) Buy securities on the open market | Increase taxes |
| (E) Decrease spending | Increase Reserve Requirement |
- 39 When Daniel purchased his house, he took out a 30 year, fixed-rate mortgage loan for 8%. At the time inflation was expected to be 4%. If the actual inflation rate turned out to be 5% who benefited from this unexpected change and what was the real interest rate?
- | <u>Who benefited</u> | <u>Real Interest Rate</u> |
|----------------------|---------------------------|
| (A) The Bank | 8% |
| (B) The Bank | 4% |
| (C) Neither | 3% |
| (D) Daniel | 4% |
| (E) Daniel | 3% |

- 40 Avery can make 30 tacos in a day or 20 burritos in a day, while Jessie can make 20 tacos in a day or 10 burritos. Which of the following must be true?
- (A) Jessie has an absolute advantage in making tacos.
 - (B) Jessie has an absolute advantage in making burritos.
 - (C) Avery has a comparative advantage in making both tacos and burritos.
 - (D) Jessie has a comparative advantage in making tacos.
 - (E) Jessie has a comparative advantage in making burritos.
- 41 If David's grandfather promises to give him a crisp, new \$100 bill on his twelfth birthday one year from today, which of the following describes the present value of that money received one year from now?
- (A) The present value will increase as interest rates increase.
 - (B) The present value is worth more than \$100 received today.
 - (C) The present value is the same value as \$100 received today.
 - (D) The present value is worth less than \$100 received today.
 - (E) Interest rate changes will have no effect on its present value.
- 42 Which of the following is illustrated by the short-run Phillips curve?
- (A) Increases in the money supply result in increases in the interest rate
 - (B) There is a trade-off between the unemployment rate and the inflation rate
 - (C) The natural rate of unemployment is constant, and thus not connected with fiscal or monetary policy shifts
 - (D) Decreases in the unemployment rate are the result of decreases in interest rates
 - (E) Increases in the inflation rate are the result of increases in interest rates
- 43 Which of the following is most likely to occur if the international value of the Canadian dollar appreciates relative to the Euro?
- (A) Canadian exports to the European Union will increase
 - (B) Canadian imports from the European Union will decrease
 - (C) The Canadian balance of trade will move toward a deficit
 - (D) Exports from the European Union to Canada will decrease
 - (E) Tourists from the European Union visit Canada in greater numbers
- 44 Given a required reserve ratio of 20 percent and assuming banks hold no excess reserves, a central bank purchases \$1000 of bonds in open market operations. What is the maximum change in each of the following?
- | Demand | Deposits | Loans | Reserves |
|--------|----------|---------|----------|
| | | | |
| (A) | \$5,000 | \$4,000 | \$4,000 |
| (B) | \$5,000 | \$5,000 | \$5,000 |
| (C) | \$5,000 | \$4,000 | \$1,000 |
| (D) | \$4,000 | \$1,000 | \$1,000 |
| (E) | \$4,000 | \$5,000 | \$1,000 |
- 45 If a nation's central bank buys government securities in the open market what will be the resulting change in that nation's interest rate, the value of the country's currency, and the change in the nation's exports and imports?
- | Interest Rates | Value of the currency | Exports | Imports |
|----------------|-----------------------|----------|----------|
| | | | |
| (A) Increase | Appreciates | Increase | Increase |
| (B) Increase | Depreciates | Increase | Decrease |
| (C) No Change | Appreciates | Decrease | Increase |
| (D) Decrease | Depreciates | Increase | Decrease |
| (E) Decrease | Appreciates | Decrease | Increase |

- 46 Which of the following helps explain why the aggregate demand curve is downward sloping?
- (A) exports increase with a rise in domestic prices, mitigating a fall in domestic consumption
 (B) nominal wages decrease as the price level rises as price level increases
 (C) higher interest rates increase net capital outflow
 (D) the ratio of consumption to price level is constant
 (E) real wealth, and thus consumption, is affected by changes in price level
- 47 In a perfectly competitive market, if both the supply of a good as well as the demand for the good decrease at the same time, what will be the resulting change in the equilibrium price and equilibrium quantity of the good?
- | | <u>Price</u> | <u>Quantity</u> |
|-----|---------------|-----------------|
| (A) | Increase | Increase |
| (B) | Decrease | Decrease |
| (C) | Increase | Indeterminate |
| (D) | Decrease | Increase |
| (E) | Indeterminate | Decrease |
- 48 Real gross domestic product (RGDP) is defined as
- (A) The value, adjusted for changes in price level, of all final goods and services consumed within a nation's borders in a given year.
 (B) The value, adjusted for changes in price level, of all goods and services produced within a nation's borders.
 (C) The value, of all final goods and services produced by a nation's businesses, foreign and domestic, in a given year.
 (D) The value, in current prices, of all final goods and services produced within a nation's borders in a given year.
 (E) The value, adjusted for changes in price level, of all final goods and services produced within a nation's borders in a given year.
- 49 If aggregate demand were to unexpectedly increase, what would be the resulting change in the price level and unemployment rate?
- | | <u>Price Level</u> | <u>Unemployment Rate</u> |
|-----|--------------------|--------------------------|
| (A) | Decrease | Decrease |
| (B) | Decrease | No change |
| (C) | Decrease | Increase |
| (D) | Increase | Decrease |
| (E) | Increase | Increase |
- 50 Assuming no crowding out, if the federal government engages in deficit spending, what would be the resulting change in the unemployment rate and price level?
- | | <u>Unemployment Rate</u> | <u>Price Level</u> |
|-----|--------------------------|--------------------|
| (A) | Increase | Increase |
| (B) | Increase | Decrease |
| (C) | No change | No change |
| (D) | Decrease | Decrease |
| (E) | Decrease | Increase |
- 51 Assuming flexible prices, a recessionary gap caused by a shift in the aggregate demand curve will cause which of the following changes in price level and real gross domestic product (RGDP) in the long run?
- | | <u>Price Level</u> | <u>RGDP</u> |
|-----|--------------------|-------------|
| (A) | Increase | Increase |
| (B) | Increase | No change |
| (C) | Decrease | Decrease |
| (D) | Decrease | No change |
| (E) | No change | Decrease |
- 52 Which of the following would be the result if the United States (US) dollar depreciated relative to other currencies?
- | | <u>US Net Exports</u> | <u>US Employment</u> |
|-----|-----------------------|----------------------|
| (A) | Increase | Increase |
| (B) | Increase | Decrease |
| (C) | Decrease | Increase |
| (D) | Decrease | Decrease |
| (E) | Decrease | No change |

- 53 Which of the following would be an appropriate fiscal policy to close a recessionary gap of \$100 billion assuming an MPC of 0.80?
- (A) Increase government expenditures by \$20 billion.
 - (B) Decrease government expenditures by \$100 billion.
 - (C) Decrease personal income taxes by \$20 billion.
 - (D) Increase personal income taxes by \$20 billion.
 - (E) Purchase \$20 billion in government securities in the open market.
- 54 The classical economists believe that the economy is self-correcting to full employment output because
- (A) the money supply will steadily grow to keep pace with population growth and full-employment output
 - (B) government fiscal policy should act counter cyclically to private investment to balance aggregate demand and aggregate supply in equilibrium
 - (C) private sector consumption and investment expenditures equal GDP at full-employment
 - (D) wages and prices are flexible
 - (E) wages and prices are “sticky”
- 55 All of the following are true of the loanable funds market *EXCEPT*?
- (A) Supply and demand for loanable funds determines the real interest rate
 - (B) Savers and lenders supply money to the loanable funds market
 - (C) Government, firms and individuals make up the demand in the loanable funds market
 - (D) The supply of loanable funds is vertical and is set by the Federal Reserve
 - (E) The loanable funds market is influenced by monetary policy
- 56 Which of the following is true of a floating exchange rate system?
- (A) Equilibrium exchange rates are determined by the free market
 - (B) Equilibrium exchange rates are determined by a combination of the free market and government agencies
 - (C) Equilibrium exchange rates are determined by, or “pegged”, by the government
 - (D) Nominal exchange rates are determined by the government, but real exchange rates are determined by the market
 - (E) The demand curve is downward sloping, as determined by the market, while the supply curve is vertical as determined by individual governments
- 57 If a nation’s economy is experiencing a recessionary gap what will happen to the short run aggregate supply curve (SRAS) in the long run if it is assumed that wages and prices are flexible?
- (A) SRAS will shift right as wages eventually decrease, returning the economy to full employment.
 - (B) SRAS will shift left while aggregate demand shifts right, returning the economy to full employment.
 - (C) SRAS will not shift, but LRAS will shift left to create a new long run equilibrium.
 - (D) SRAS will shift right as the federal government increases spending to return the economy to long run equilibrium.
 - (E) SRAS will shift left as the federal government lowers corporate taxes to return the economy to long run equilibrium.

- 58 If the real interest rate in the United States decreases relative to the rest of the world what will be the resulting changes in U.S. capital flow, net exports and aggregate demand?

	<u>Capital Flow</u>	<u>Net Exports</u>	<u>Aggregate Demand</u>
(A) Inflow	Increase	Increase	
(B) Inflow	Increase	Decrease	
(C) Outflow	Increase	Increase	
(D) Outflow	Increase	Decrease	
(E) Outflow	Decrease	Increase	

- 59 Assume the inflation rate in Mexico is significantly higher than its trading partners. Which of the following will occur to the demand, supply, and international value of the Mexican Peso?

	<u>Demand</u>	<u>Supply</u>	<u>Value</u>
(A) Increase	Increase	Depreciate	
(B) Increase	Decrease	Appreciate	
(C) Decrease	Increase	Appreciate	
(D) Decrease	Increase	Depreciate	
(E) Decrease	Decrease	Depreciate	

- 60 An increase in which of the following would likely lead to a decrease in national income?
(A) Investment expenditures
(B) Imports
(C) Government spending
(D) Exports
(E) Consumption expenditures

<u>MACROECONOMICS</u>			
Practice Exam #2			
Q#	Ans.	Unit	Topic
1	C	1	Production Possibilities
2	B	4	Open Mrkt Operations
3	E	3	AD/AS
4	C	3	Growth
5	A	3	Income
6	C	4	GDP Deflator
7	A	4	Quantity Theory
8	B	3	Cost Push Inflation
9	A	2	GDP
10	D	1	Scarcity
11	E	4	Monetary Policy
12	E	3	AD/AS
13	C	3	Spending Multiplier
14	D	2	CPI
15	D	4	Loanable Funds
16	D	4	Money Market
17	B	4	Bank Balance Sheets
18	C	3	Income
19	A	2	Unemployment
20	B	1	Economic Systems
21	A	2	GDP Deflator
22	D	2	Unemployment
23	C	3	AD/AS
24	A	5	Imports
25	B	3	Debt
26	A	3	Long Run Adjustments
27	A	3	Fiscal Policy
28	E	3	Phillips Curve
29	D	4	Money Multiplier
30	D	1	Demand and Supply

Q#	Ans.	Unit	Topic
31	E	4	Money Market
32	E	3	Growth
33	B	3	Crowding Out
34	A	5	Net Exports
35	D	2	Full Employment
36	B	3	LRAS
37	B	4	Open Mrkt Operations
38	B	4	Fiscal/Monetary Policy
39	E	3	Inflation
40	D	1	Comparative Advantage
41	D	4	Present value
42	B	3	Phillips Curve
43	C	5	Foreign Exchange
44	C	4	Money Multiplier
45	D	5	Foreign Exchange
46	E	3	AD/AS
47	E	1	Demand and Supply
48	E	2	GDP
49	D	3	AD/AS
50	E	3	Fiscal Policy
51	D	3	AD/AS
52	A	5	Net Exports
53	A	3	Spending Multiplier
54	D	3	Long Run Adjustments
55	D	4	Loanable Funds
56	A	5	Foreign Exchange
57	A	3	Long Run Adjustments
58	C	5	Capital Flow
59	D	5	Foreign Exchange
60	B	2	GDP

Thank you for buying the Ultimate Review Packet and supporting ACDC Econ.

To watch a video of me going over each of these questions please go to:

<http://www.acdcecon.com/exams>

- Jacob Clifford

Microeconomics Concepts and Videos

Unit 1: Basic Economic Concepts

UNIT 1 Overview- Introduction

- Scarcity
- Microeconomics vs. Macroeconomics
- Positive vs. Normative Economics
- Self-Interest and Incentives
- Marginal Analysis
- Opportunity Cost and Trade-offs
- Four Factors of Production
- Capital Goods and Future Growth

VIDEO 1.1- Production Possibilities Curve

- Efficiency
- Straight vs. Bowed PPC
- Law of Increasing Opportunity Costs

VIDEO 1.2- Shifting the PPC

- Shifters of the PPC

VIDEOS 1.3/1.4- Specialization and Trade

- Absolute and Comparative Advantage
- Terms of Trade

VIDEO 1.5- Comparative Advantage

- Output and Input Questions

VIDEO 1.6- Economic Systems

- Free-Market Economy
- Centrally Planned Economy

VIDEO 1.7- Circular Flow Model

- Product and Factor Markets
- Private and Public Sector
- Factor Payments
- Transfer Payments

Unit 2: Supply, Demand, and Consumer Choice

VIDEO 2.1- Demand

- Law of Demand
- Substitution Effect and Income Effect
- Law of Diminishing Marginal Utility
- 5 Shifters (Determinants) of Demand
- Substitutes and Complements
- Normal Goods vs. Inferior Goods

VIDEO 2.2- Supply and Equilibrium

- Law of Supply
- 6 Shifters (Determinants) of Supply
- Quantity Supplied vs. Supply

VIDEO 2.3/2.4- Shifting Demand and Supply

- Equilibrium Price and Equilibrium Quantity
- Disequilibrium: Surplus and Shortage

VIDEO 2.5- Double Shifts

- Double Shift Rule

VIDEO 2.6- Price Controls and Efficiency

- Price Floors and Ceilings

VIDEO 2.7- Consumer and Producers Surplus

- CS, PS, and Deadweight Loss

VIDEO 2.8- Welfare Economics and Trade

- Benefits of Trade
- Tariffs and Quotas

VIDEO 2.9- Elasticity

- Price Elasticity of Demand
- The Total Revenue Test

VIDEO 2.10- Other Elasticities

- Income Elasticity of Demand
- Cross-Price Elasticity of Demand
- Price Elasticity of Supply

VIDEO 2.11- Excise Taxes

- Effect of Excise Taxes

VIDEO 2.12- Consumer Choice

- Marginal Benefit and Marginal Costs
- Utility Maximizing Rule

Unit 3: Costs of Production and Perfect Competition

VIDEO 3.1- Diminishing Marginal Returns

- Total Product and Marginal Product
- Three Stages of Returns

VIDEO 3.2- Long-Run Costs

- Economies and Diseconomies of Scale

VIDEO 3.3- Short-Run Costs of Production

- Fixed Costs, Variable Costs, and Total Cost
- Per-Unit Costs- (AVC, AFC, ATC)
- Shifts in MC, ATC, AVC, and AFC.
- Marginal Cost and Marginal Revenue

VIDEO 3.4- Shape of the Cost Curves

- Why is ATC "U" Shaped

VIDEO 3.6- Revenue and Profit

- Explicit vs. Implicit Costs
- Accounting vs. Economic Profit
- Profit Maximizing Rule ($MR=MC$)

VIDEO 3.7- The Shut Down Rule

- Shut Down Rule ($P < AVC$)

VIDEO 3.8/3.9- Perfect Competition- Short-Run

- Price Takers, Graph for Market and Firm

VIDEO 3.10/3.11- Perfect Competition- Long-Run

- No Barrier to Entry
- Normal Profit

VIDEO 3.12- Perfect Comp and Efficiency

- Productive Efficiency ($P = \text{Min ATC}$)
- Allocative Efficiency ($P = MC$)

Unit 4: Imperfect Competition

VIDEO 4.1- Demand and Marginal Revenue

- MR < Demand

VIDEO 4.2 and 4.7- Monopoly Practice

- Profit-Maximizing Price and Quantity

VIDEO 4.3- Deadweight loss caused by monopoly

- CS, PS, and Deadweight loss

VIDEO 4.4- Elastic vs. Inelastic Range

- Maximizing revenue and elastic range

VIDEO 4.5- Regulating a Monopoly

- Natural Monopoly
- Fair Return Price
- Socially Optimal Price

VIDEO 4.6- Lump Sum vs. Per Unit

- Lump Sum taxes and Per Unit taxes

VIDEO 4.8- Price Discrimination

- Graph for Price Discriminating Monopoly

VIDEO 4.9- Oligopolies and Game Theory

- Game Theory Matrix

VIDEO 4.10- Game Theory Practice

- Dominant Strategy
- Nash Equilibrium

VIDEO 4.11- Kinked Demand Curve Theory

- Kinked Demand Model

VIDEO 4.12 Monopolistic Competition

- Differentiated Products
- Long-Run Equilibrium
- Excess Capacity

Unit 5: Resource Market

VIDEO 5.1-Demand and Supply for Labor

- Derived demand
- Shifters of Labor Demand
- Shifters of Labor Supply

VIDEO 5.2- Minimum Wage

- Minimum Wage

VIDEO 5.2- Perfectly Competitive Market and Firm

- Wage Takers
- Marginal Revenue Product (MRP)
- Marginal Resource Cost (MRC)

VIDEO 5.3- Profit Maximizing

- Profit Maximizing Rule for Labor

VIDEO 5.4- Combining Resources

- Least Cost Rule

VIDEO 5.5- Monopsonies

- Wage Makers
- Monopsony Wage and Quantity

Unit 6: Market Failures and Government Involvement

VIDEO 6.1- Public Goods

- Public Goods
- Free-Rider Problem
- Non-Exclusion
- Non-Rivalry (Shared Consumption)

VIDEO 6.2- Marginal Social Benefit and Cost

- MSB = MSC

VIDEO 6.3- Negative Externalities

- Negative Externalities (Spillover Costs)
- Marginal Private Cost

VIDEO 6.4- Positive Externalities

- Positive Externalities (Spillover Benefits)
- Marginal Private Benefit

VIDEO 6.5- Income Distribution

- Lorenz Curve
- Gini Coefficient
- Government Transfer Payments

VIDEO 6.6- Types of Taxes

- Progressive Taxes
- Regressive Taxes
- Proportional Taxes

Micro Key Graphs

- Production Possibilities Curve
- Demand and Supply
- Demand and Supply: Price Controls
- Demand and Supply: Excise Tax
- Demand and Supply: Trade and Tariffs
- Side-by-Side Product Market and Firm
- Monopoly
- Price Discriminating Monopoly
- Monopolistic Competition
- Game Theory Matrix
- Side-by-Side Resource Market and Firm
- Monopsony
- Negative Externality
- Positive Externality
- Lorenz Curve

Microeconomics Unit 1: Basic Economics Concepts

Key Terms- Define the following:	3 Economic Systems
1. Scarcity	1. Centrally Planned Economies
2. Consumer Goods vs. Capital Goods	2. Free-Market Economies (Capitalism)
3. Trade-offs	3. Mixed Economies
4. Opportunity Cost	

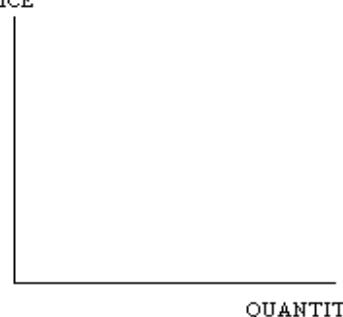
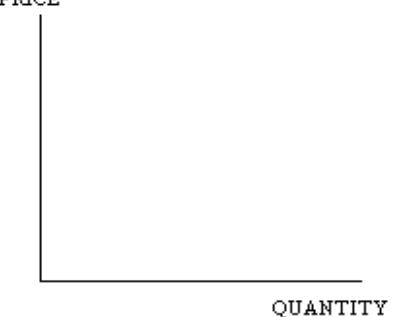
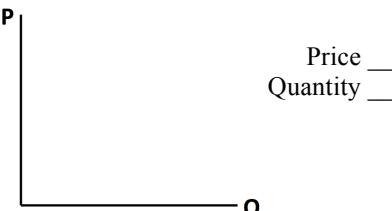
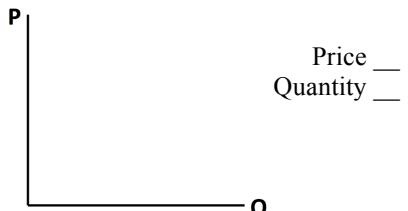
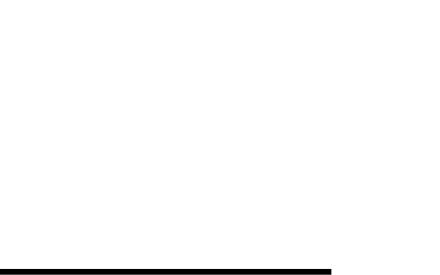
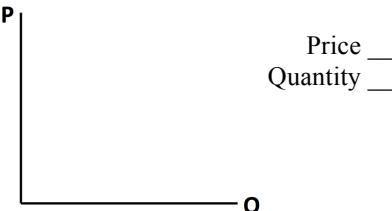
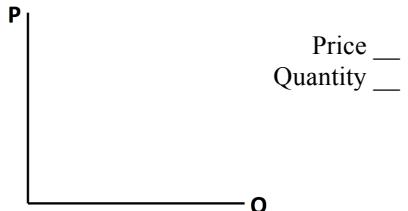
Production Possibilities Curve (Frontier)

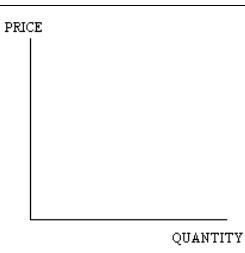
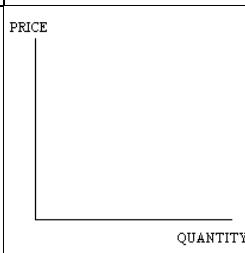
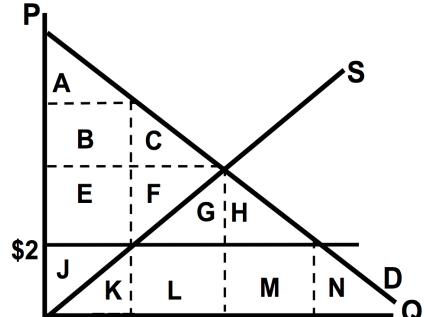
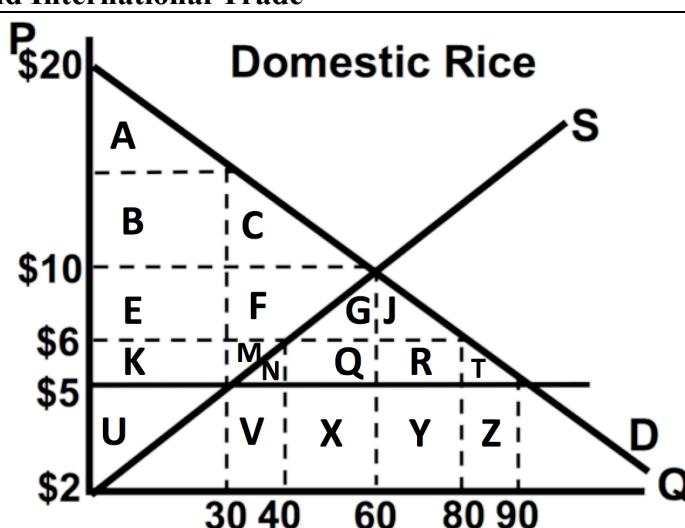
Use the chart to create a PPC to the right. <table border="1" style="margin-bottom: 10px;"> <thead> <tr> <th></th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th></tr> </thead> <tbody> <tr> <td>Hats</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr> <td>Shoes</td><td>30</td><td>29</td><td>25</td><td>15</td><td>0</td></tr> </tbody> </table> Label the following three points on the graph: X= Unemployment/Inefficiency Y= Efficient Z= Impossible given current resource		A	B	C	D	E	Hats	0	1	2	3	4	Shoes	30	29	25	15	0	<div style="margin-top: 20px;"> Calculate the Opportunity Cost: A→B: _____ B→C: _____ E→D: _____ C→A: _____ </div>
	A	B	C	D	E														
Hats	0	1	2	3	4														
Shoes	30	29	25	15	0														

Constant Opportunity Cost

Why does this occur? Draw the graph below Bicycles Tricycles	Why does this occur? Draw the graph below Bikes iPhones
---	--

Efficiency	Shifting the PPC																		
Difference between allocative and productive efficiency:	Identify the three shifters of the PPC																		
Production Possibilities Practice (draw 3 PPCs with pizza and cars)																			
Scenario: Workers lose their jobs due to a recession Pizza	Scenario: Increase in consumer demand for pizza Pizza	Scenario: More resources that improve the production of cars Pizza																	
Absolute and Comparative Advantage																			
Output Questions	Input Questions																		
The table shows the amount of sugar and cars each country can make with the same number of resources <table border="1" data-bbox="115 1030 780 1241"> <thead> <tr> <th></th><th>Sugar (tons)</th><th>Cars</th></tr> </thead> <tbody> <tr> <td>Cuba</td><td>40</td><td>10</td></tr> <tr> <td>Mexico</td><td>50</td><td>100</td></tr> </tbody> </table>		Sugar (tons)	Cars	Cuba	40	10	Mexico	50	100	The table shows the number of hours it takes to produce a ton of sausage and a ton of computers <table border="1" data-bbox="833 1030 1514 1241"> <thead> <tr> <th></th><th>Sausage</th><th>Computers</th></tr> </thead> <tbody> <tr> <td>Canada</td><td>2</td><td>6</td></tr> <tr> <td>UK</td><td>10</td><td>10</td></tr> </tbody> </table>		Sausage	Computers	Canada	2	6	UK	10	10
	Sugar (tons)	Cars																	
Cuba	40	10																	
Mexico	50	100																	
	Sausage	Computers																	
Canada	2	6																	
UK	10	10																	
1. Which country has an absolute advantage in sugar? How about cars? 2. What is Cuba's opportunity cost for producing one car? 3. Which country has a comparative advantage in cars? How about sugar? 4. For both countries to benefit from trade, how much sugar can be traded for each car? 1 Car for _____ Sugar	1. Which country has an absolute advantage in sausage? How about computers? 2. What is Canada's opportunity cost for producing one computer? 3. Which country has a comparative advantage in computers? How about sausage? 4. For both countries to benefit from trade, how many sausages can be traded for each computer? 1 comp for _____ sausage																		
Circular Flow Matrix (Model)																			
Product Market- Factor (Resource) Market- Factor Payments- Transfer Payments-	Draw the Circular Flow Matrix																		

Microeconomics Unit 2: Demand, Supply, and Consumer Choice		
Demand	Supply	
The Law of Demand: P↑ Qd ____ P↓ Qd ____	The Law of Supply: P↑ Qs ____ P↓ Qs ____	
What is the different between a change in quantity demanded and a change in demand?		
Changes in Demand and Supply (Shifting the Curve)		
What changes demand? (5 Shifters of Demand)	What changes supply? (5 Shifters of Supply)	
Substitutes: Price of A↑ Demand for B ____ Price of A↓ Demand for B ____	Normal Goods: Income ↑ Demand ____ Income ↓ Demand ____	
Complements: Price of A↑ Demand for B ____ Price of A↓ Demand for B ____	Inferior Goods: Income ↑ Demand ____ Income ↓ Demand ____	
Equilibrium and Disequilibrium		
Draw a shortage PRICE  QUANTITY	Draw a surplus PRICE  QUANTITY	Price Ceiling- When binding, ceilings go ____ equilibrium and result in a ____ Price Floor- When binding, floors go ____ equilibrium and result in a ____ Subsidy-
Supply and Demand Practice		
Demand Decrease P  Q	Demand Increase P  Q	If demand increases AND supply increases then price ____ and quantity ____ Price  Quantity
Supply Decrease P  Q	Supply Increase P  Q	Double Shift Rule:

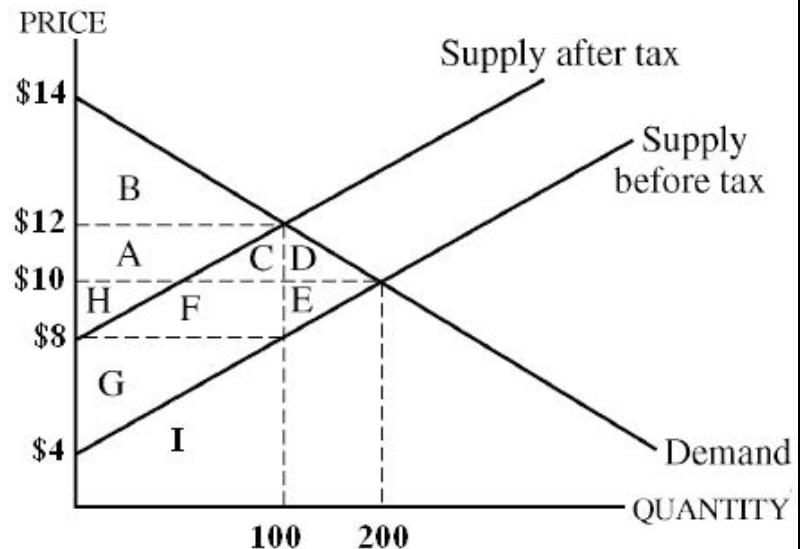
Inelastic Demand	Elastic Demand	Total Revenue Test		
 Characteristics <ul style="list-style-type: none"> 1. 2. 3. 	 Characteristics <ul style="list-style-type: none"> 1. 2. 3. 	Inelastic Demand Price ↑, TR _____ Price ↓, TR _____ Elastic Demand Price ↑, TR _____ Price ↓, TR _____		
Elasticity of Demand Coefficient		Elasticity of Supply Coefficient		
Equation-		Equation-		
Perfectly Inelastic = Relatively Inelastic = Unit Elastic = Relatively Elastic = Perfectly Elastic =		Perfectly Inelastic = Relatively Inelastic = Unit Elastic = Relatively Elastic = Perfectly Elastic =		
Cross-Price Elasticity of Demand		Income Elasticity of Demand		
Definition-		Definition-		
Equation-		Equation-		
Positive: _____ Negative: _____		Positive _____ Negative _____		
Consumer Surplus (CS) and Producer Surplus (PS)				
Consumer Surplus (CS)-	Identify at equilibrium 1. CS- 2. PS- 3. DWL-			
Producer Surplus (PS)-	Identify when there is a price ceiling at \$2			
Deadweight Loss (DWL)-	4. CS- 5. PS- 6. DWL-			
				
Welfare Economics and International Trade				
The graph shows the domestic market for rice. Identify and calculate the following at equilibrium 1. Consumer surplus- 2. Producer surplus- 3. Total surplus- Identify the following if this country buys rice from other countries for \$5 4. Quantity produced domestically- 5. Quantity imported- 6. Consumer surplus- 7. Producer surplus- Identify if the government places a tariff of \$1 8. Consumer surplus- 9. Tariff revenue- 10. Deadweight Loss-				

Excise Tax Practice**Before tax**

1. CS before tax:
2. PS before tax:

After Tax

3. Tax per unit:
4. CS after tax:
5. PS after tax:
6. Dead weight loss:
7. Total tax revenue to gov:
8. Total spending by buyers:
9. Total revenue to sellers:
10. Total amount of tax buyer pay:
11. Total amount of tax sellers pay:
12. Is the demand curve between \$12 and \$10 elastic, inelastic, or unit elastic?

**Consumer Choice and Maximizing Utility**

Utility Maximizing Rule:

You can choose any combination of two different activities, the movies (\$10) or riding go carts (\$5).

1. If you only have \$25, what combination maximizes your utility?

2. What combo is best if you have \$40?

# Times Going	Marginal Utility (Movies)	MU/P	Marginal Utility (Go Carts)	MU/P
1st	30		10	
2nd	20		5	
3rd	10		2	
4th	5		1	

3. What is the total utility from consuming 3 movies and 2 go carts?

...on second thought, don't punch them. E-mail me their name and address. I'll take care of it.

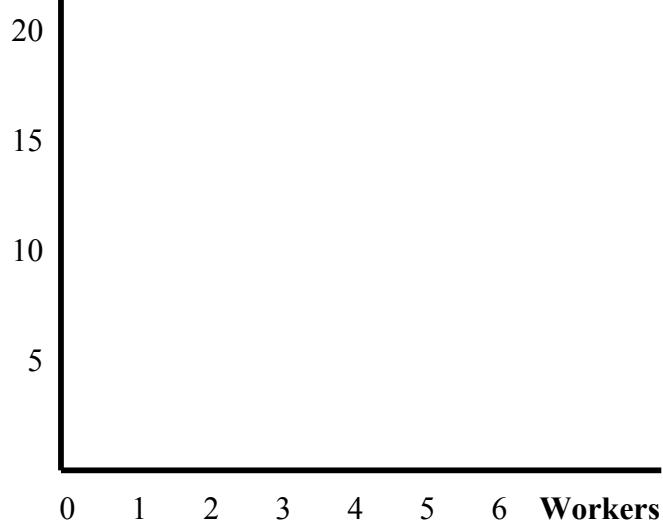
Unit 3: Costs of Production and Perfect Competition

Production and the Law of Diminishing Marginal Returns

Calculate MP. Plot TP and MP on Graph

Number of Workers	Total Product	Marginal Product
0	0	-
1	5	
2	15	
3	19	
4	20	
5	20	
6	18	

Output



Define the Law of Diminishing Marginal Returns

After which worker does diminishing marginal returns set in?

Identify the three stages of returns: increasing, decreasing, and negative marginal returns

Revenue and Costs (Define the following)

Total Revenue-

Fixed Cost (FC)-

Accounting Profit-

Variable Cost (VC)-

Economic Profit-

Total Cost (TC)-

Normal Profit-

Marginal Cost (MC)-

Short Run Cost Curves (at least one fixed resource)

Long-Run Cost Curves (all resources are variable)

Draw and label ATC, AVC, and MC

Costs

Costs

Output

Economies of Scale-

Quantity

Diseconomies of Scale-

Calculating ATC, AVC, AFC, and MC

Fill in the blanks for a firm producing boxes of oranges:

Output (boxes)	Variable Cost	Total Cost	AVC	AFC	ATC	MC
0	\$0	\$10	-	-	-	-
1	20					
2	30					
3	60			\$3.3	\$23	
4	100			\$2.5	\$27	

Assume this firm is in a perfectly competitive market and the price is \$35 for each box.

1. How many boxes should they produce? Why?

2. Calculate the profit at that quantity

Shut Down Point*

Per-Unit vs. Lump-Sum

Characteristics of Perfect Competition

Shut Down Rule:

1. A per unit tax shifts _____ so quantity will _____.

Short-Run Supply Curve:

2. A lump sum tax shifts _____ so quantity will _____.

Graphing Perfect Competition

Draw side-by-side graphs showing a perfectly competitive market and firm. Draw the firm making profit

Market

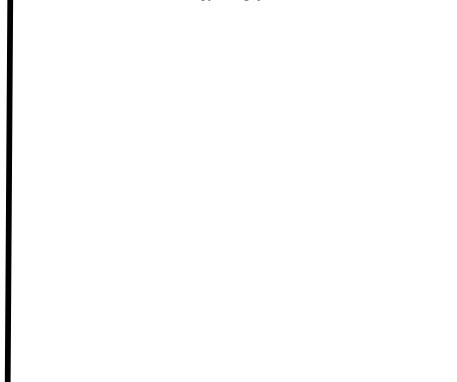
Firm



Draw a perfectly competitive market and a firm with the firm making a loss

Market

Firm



Calculation Practice

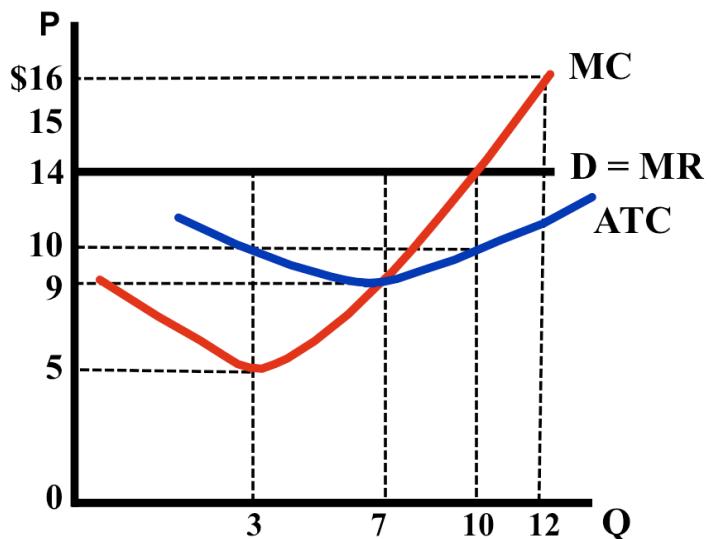
Assume the price is \$14 and the firm produces the profit maximizing quantity. Identify the following:

1. Quantity-
2. Total revenue-
3. Total cost-
4. Economic profit-
5. What will happen to the number of firms in the market in the long run?

Assume the market adjust to the long run. Identify:

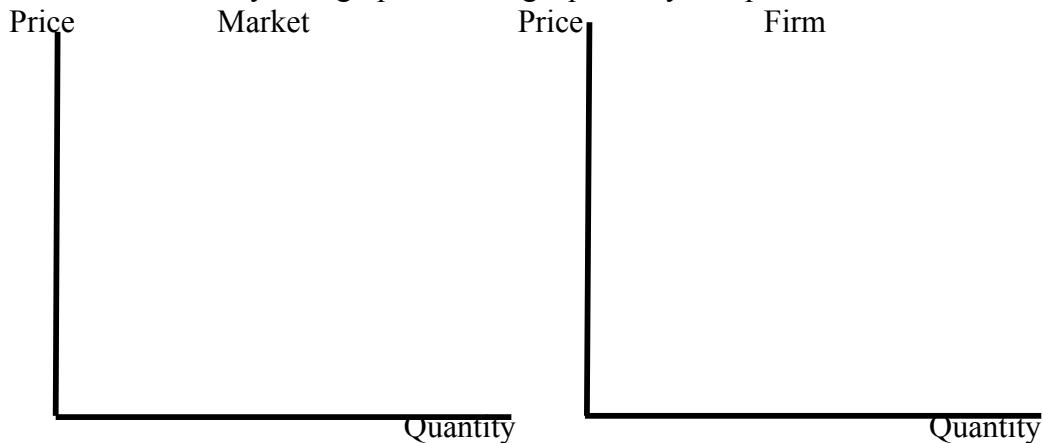
6. Price-
7. Quantity-
8. What will happen to number of firms in the market?

If the price was \$5, should the firm shut down in the short run?



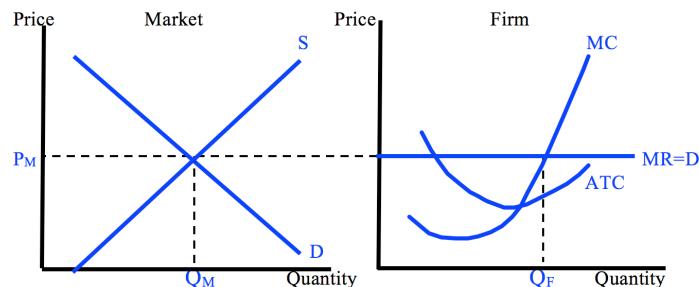
Perfect Competition in the Long Run

Draw side-by-side graphs showing a perfectly competitive market and firm in long run equilibrium



From Short Run to Long Run

Draw what happens to each graph in the long run



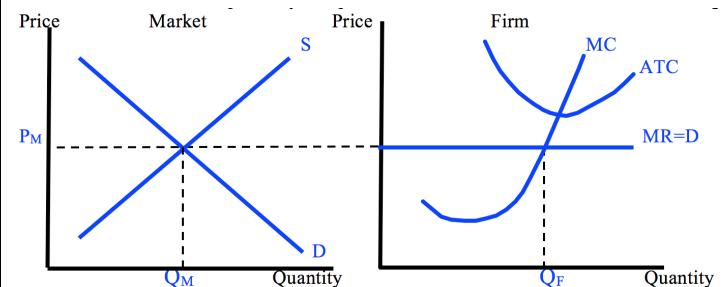
Market:

Price _____ Quantity _____

Firm:

Price _____ Quantity _____

Draw what happens to each graph in the long run



Market:

Price _____ Quantity _____

Firm:

Price _____ Quantity _____

Efficiency in the Long Run

In the long run, perfectly competitive firms have both types of efficiency:

- 1.
- 2.

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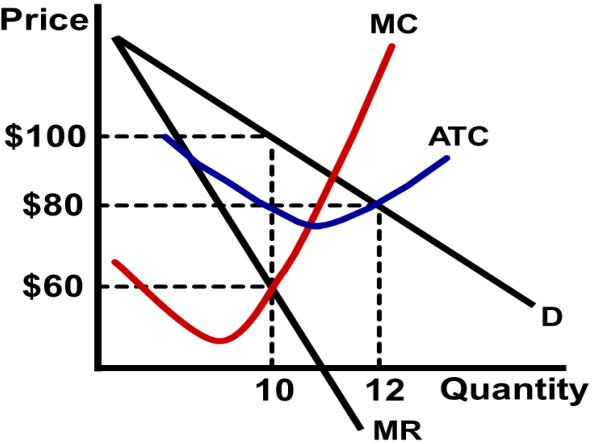
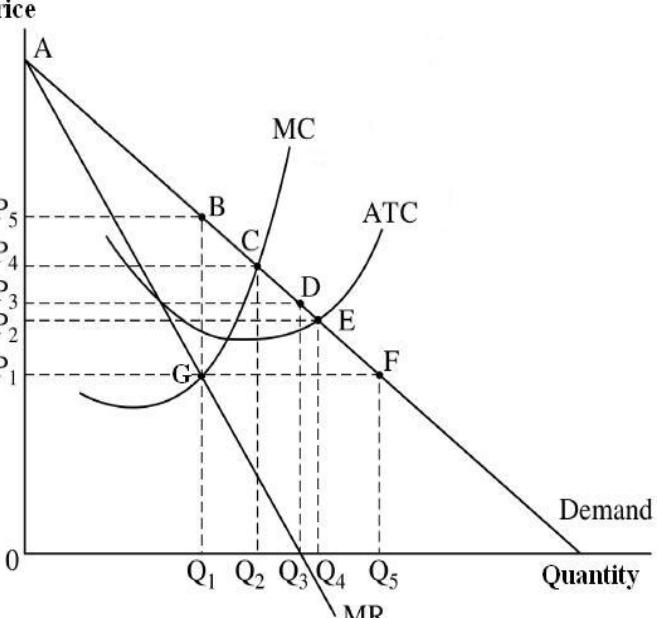
Unit 4: Imperfect Competition

List the Characteristics of the Four Market Structures

Perfect Competition	Monopolistic Competition	Oligopoly	Monopoly
Demand and Marginal Revenue		Elastic and Inelastic Range	
Why is demand greater than marginal revenue for all imperfectly competitive firms?		Draw a monopoly's demand, MR, and total revenue Identify the elastic and inelastic ranges	
Why are monopolies inefficient?			
Monopoly Graph (profit) Draw and label a monopoly making profit			
Monopoly Graph (loss) Draw and label a monopoly making a loss		Barriers to Entry Identify four common barriers that allow companies to gain and maintain market power	
		Natural Monopolies What is a natural monopoly?	

If your teacher gave you this without paying, they are a jerk

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Regulating Monopolies	Calculation Practice
<p>Draw a natural monopoly. Identify: unregulated quantity (Q_M), socially optimal quantity (Q_{SO}) and fair return quantity (Q_{FR})</p> <p>Price</p>  <p>Quantity</p>	 <ol style="list-style-type: none"> If this monopoly is unregulated, what is the total revenue, total cost, and profit? Shade in Deadweight loss
Monopoly Practice	
	<p>If this was competitive market</p> <ol style="list-style-type: none"> Price and quantity: Consumer surplus: <p>If this is an unregulated monopoly</p> <ol style="list-style-type: none"> Price and quantity: Consumer surplus: Deadweight loss: Quantity total revenue maximized: Quantity if it perfectly price discriminates: Elastic range of the demand curve: If the government placed a per unit tax on this monopoly then price ____ and quantity ____ If the government placed a lump sum subsidy on this monopoly then price ____ and quantity ____.
Price Discrimination	Perfectly Price Discriminating Monopoly
<p>Identify the three conditions necessary for a firm to price discriminate</p> <p>If a regular unregulated monopoly started perfectly price discriminating, what would happen to consumer surplus and deadweight loss?</p>	<p>Draw and label a price discriminating monopoly</p> <p>Price</p>  <p>Quantity</p>

Did you buy this packet? You did! Ok, we're cool

Oligopolies and Game Theory													
<p>1. If David decides to advertise now and Lindsey decides to do it later, what is David's expected profit?</p> <p>2. What is Lindsey's dominant strategy?</p> <p>3. What is David's dominant strategy?</p> <p>4. If both owners have the information but do not actively collude, what will be the outcome?</p> <p>Assume the advertising company offers a deal that increases the profit for both owners by \$2,000 but only if they advertise later. Based on these changes:</p> <p>5. What is Lindsey's dominant strategy?</p> <p>6. What is David's dominant strategy?</p>	<p>Assume that two business owners are deciding between advertising now and advertising later. The chart shows expected profit with Lindsey's on the left</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">David</td> <td style="text-align: center;">Now</td> <td style="text-align: center;">Later</td> </tr> <tr> <td style="text-align: right;">Now</td> <td style="text-align: center;">\$5,000, \$4,000</td> <td style="text-align: center;">\$3,000, \$3,500</td> </tr> <tr> <td style="text-align: right;">Lindsey</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Later</td> <td style="text-align: center;">\$900, \$1,000</td> <td style="text-align: center;">\$1,500, \$1,800</td> </tr> </table>	David	Now	Later	Now	\$5,000, \$4,000	\$3,000, \$3,500	Lindsey			Later	\$900, \$1,000	\$1,500, \$1,800
David	Now	Later											
Now	\$5,000, \$4,000	\$3,000, \$3,500											
Lindsey													
Later	\$900, \$1,000	\$1,500, \$1,800											
Kinked Demand Curve	Nash Equilibrium												
<p>Draw non-colluding oligopoly</p> <p>Price</p>  <p>Quantity</p>	<p>Definition of Nash Equilibrium-</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">Firm 2</td> <td></td> </tr> <tr> <td style="text-align: right;">High</td> <td style="text-align: center;">Low</td> </tr> <tr> <td style="text-align: right;">Firm 1</td> <td></td> </tr> <tr> <td style="text-align: right;">High</td> <td style="text-align: center;">\$100, \$50</td> <td style="text-align: center;">\$60, \$90</td> </tr> <tr> <td style="text-align: right;">Low</td> <td style="text-align: center;">\$50, \$40</td> <td style="text-align: center;">\$20, \$10</td> </tr> </table> <p>Assume these two firms can choose between pricing high and pricing low. What is the Nash Equilibrium?</p>	Firm 2		High	Low	Firm 1		High	\$100, \$50	\$60, \$90	Low	\$50, \$40	\$20, \$10
Firm 2													
High	Low												
Firm 1													
High	\$100, \$50	\$60, \$90											
Low	\$50, \$40	\$20, \$10											
Monopolistic Competition													
<p>Draw a Mono. Comp. firm in long-run equilibrium</p> <p>Price</p>  <p>Quantity</p>	<p>Excess Capacity (define below and label on graph)</p> <p>If a monopolistically competitive firm is making a profit in the short-run, what will happen to the demand and number of firms in the long run?</p>												
What are examples of non-price competition?	What are the two goals of advertising?												

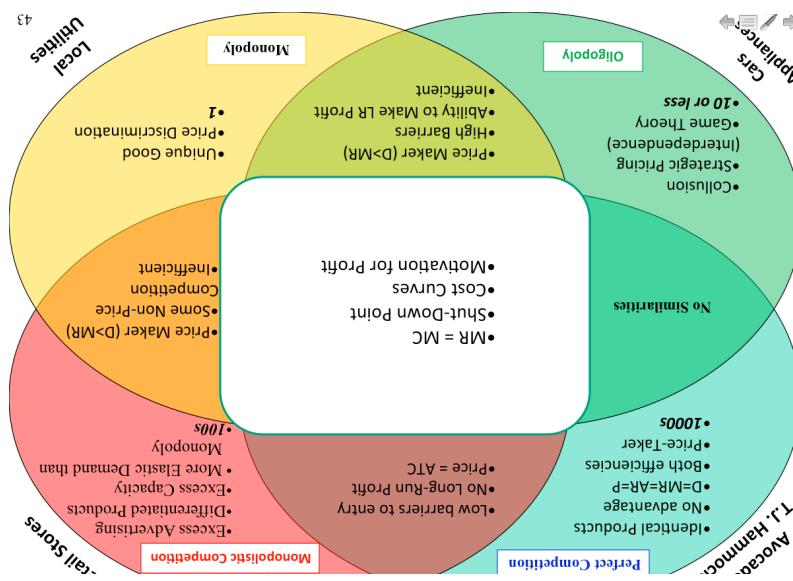
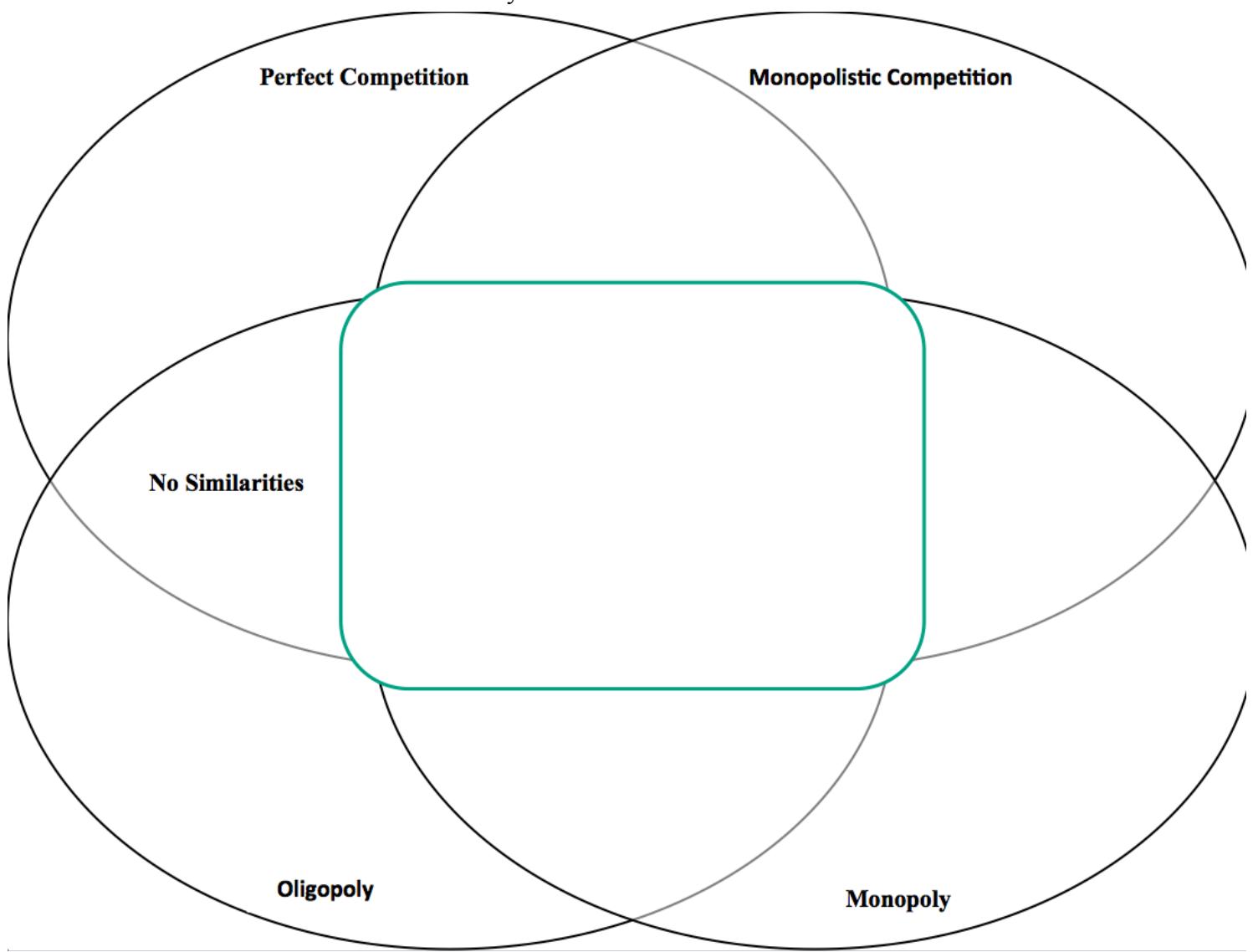
Dude, please don't post this online

Did you buy this packet? You did! Ok, we're cool

Market Structures Venn Diagram

Fill in the areas with the different characteristics of the four market structures.

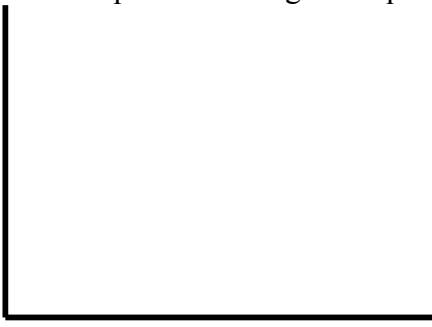
Many characteristics are shared.



Answers

Unit 5: The Resource Market

Define Key Terms

The Resource (Factor) Market-	Derived Demand-
Demand for Labor-	Marginal Revenue Product (MRP)-
Supply for Labor-	Marginal Resource Cost (MRC)-
Demand and Supply for Labor	Resource Shifters and Equilibrium
Draw a competitive market for plumbers. Label the equilibrium wage and quantity 	Shifters of Labor Demand- Shifters of Labor Supply- If the equilibrium wage for electricians is \$15 an hour and the government established a minimum wage of \$10 an hour, what will happen to the wage and quantity?
Minimum Wage	Labor Market Practice
Draw the results of a minimum wage. Label the quantity supplied (Qs) & the quantity demanded (Qd) 	<ol style="list-style-type: none"> If the demand for houses increases, the wage of carpenters will ____ and the quantity will ____. Assume bricks and wood are substitute resources. If the price of bricks increases, the price of wood ____ and the quantity ____. If the government removes all regulations for becoming a dentist. The wages for dentists will ____ and the quantity will ____. If demand for accountants falls at the same time that the supply increases, the wage will ____ and the quantity will ____. Will a binding minimum wage lead to relatively less unemployment when the demand for labor is inelastic or when it is elastic?
Wage	Quantity of Labor

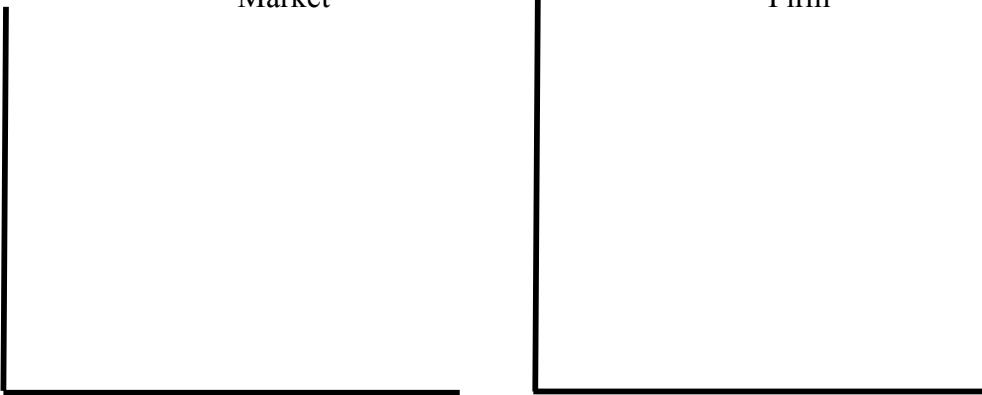
If your friend gave you this, they will probably steal your wallet someday

Perfectly Competitive Labor Market and Firm

Draw side-by-side graphs showing a perfectly competitive market and firm hiring workers

Market

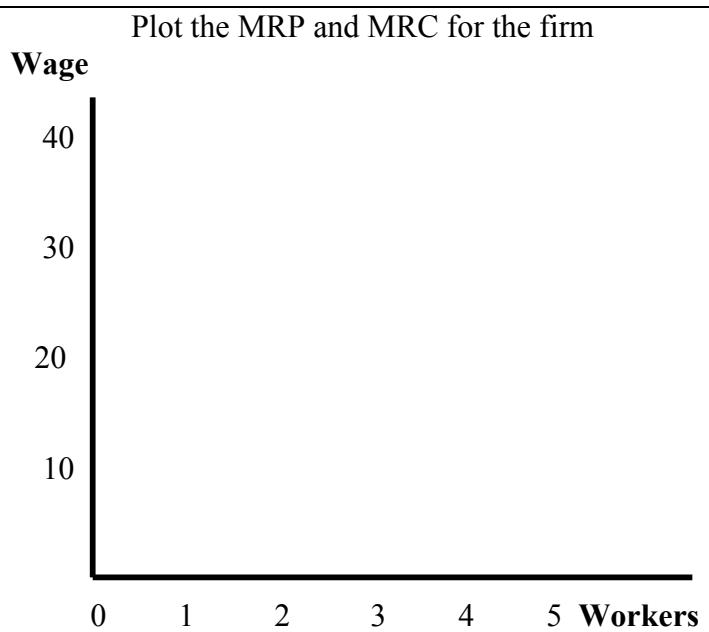
Firm



Calculating MRP and MRC

Number of Workers	Total Product	Marginal Product	Marginal Revenue Product
0	0	-	-
1	5		
2	13		
3	18		
4	21		
5	20		

- Assume perfectly competitive product and labor markets. If the price of the product is \$5 and the wage is \$20, how many workers should be hired?
- How much is the profit or loss?
- Assume that this firm develops a process that makes only their workers more productive. The wage will _____ and the quantity will _____.



Combining Resources

Least cost rule when combining resources-

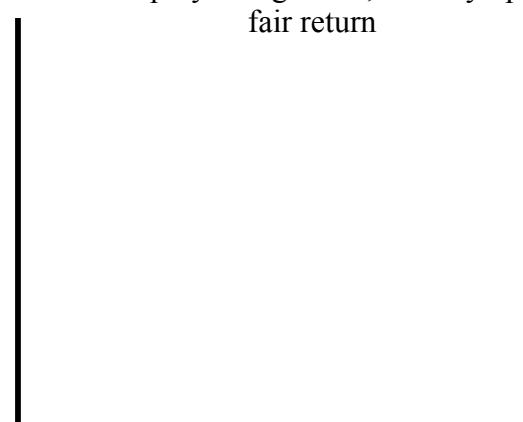
Profit maximizing rule for combining resources-

Assume a company uses two resources, workers and robots, and the MRC for each is \$20. Currently the MRP of the last worker hired is \$30 and the MRP of the last robot is \$10. The company should _____ the number of workers and _____ the number of robots.

Monopsony

Draw a monopsony and label the unregulated wage and quantity



Unit 6: Market Failures and the Role of the Government	
Public Goods	Externalities
Why are public goods a market failure? Two Characteristic of Public Goods: 1. Nonexclusion- 2. Shared consumption- Maximizing Rule for Public Goods-	Negative Externality- Positive Externality- Why are externalities a market failure? Tragedy of the Commons-
Negative Externalities	Positive Externalities
Draw a negative externality. Label the free market quantity, optimal quantity, and deadweight loss 	Draw a positive externality. Label the free market quantity, optimal quantity, and deadweight loss 
Correcting Externalities	Regulating Monopolies
Solutions to solve a negative externality- Solutions to solve a positive externality- How does Coase Theorem seek to solve negative externalities?	Label a monopoly unregulated, socially optimal, and fair return 

Thanks for buying this packet. Seriously. Thank you!

Income Inequality	
What are transfer payments?	Draw and label the Lorenz Curve showing equal distribution of income and the actual distribution
What is the Gini Coefficient?	
What would happen to the Gini Coefficient if the government increased the amount it taxes wealthier citizens and increase transfer payments to the poor?	
Types of Taxes	Tax Incidence
1. Progressive Tax-	Draw a competitive market with relatively inelastic demand and relatively elastic supply. Draw an excise tax and label the amount consumers and producers pay of tax
2. Proportional Tax-	
3. Regressive Tax-	
Income Distribution Practice	
1. What is the difference between income inequality and wealth inequality?	
2. An increase in job training for low-skilled workers would likely _____ income inequality and cause the Gini coefficient to _____. _____.	Who pays more of the tax: 1. If demand is elastic and supply is inelastic? 2. If demand is inelastic and supply is elastic? 3. If demand is perfectly inelastic?

Congratulations! You're done with microeconomics

Microeconomics Unit 1: Basic Economics Concepts

Key Terms- Define the following:	3 Economic Systems
<p>1. Scarcity Individuals, businesses, and governments have unlimited wants but limited resources.</p> <p>2. Consumer Goods vs. Capital Goods Consumer goods- (ex: pizza) goods made for direct consumption Capital goods- (ex: restaurant oven) goods made for indirect consumption. Goods that make consumer goods</p> <p>3. Trade-offs ALL possible options given up when you make a choice</p> <p>4. Opportunity Cost The ONE best option given up when you make a choice including the money, time, and forgone opportunities.</p>	<p>1. Centrally Planned Economies Economic system where the government owns the resources and decides what to make, how to make it, and who gets it. Total government control of the economy</p> <p>2. Free-Market Economies (Capitalism) Economic system where individual citizens own the resources and decides what to make, how to make it, and who gets it. Little or no government involvement in the economy</p> <p>3. Mixed Economies Almost all economies are a mixture of the above systems.</p>

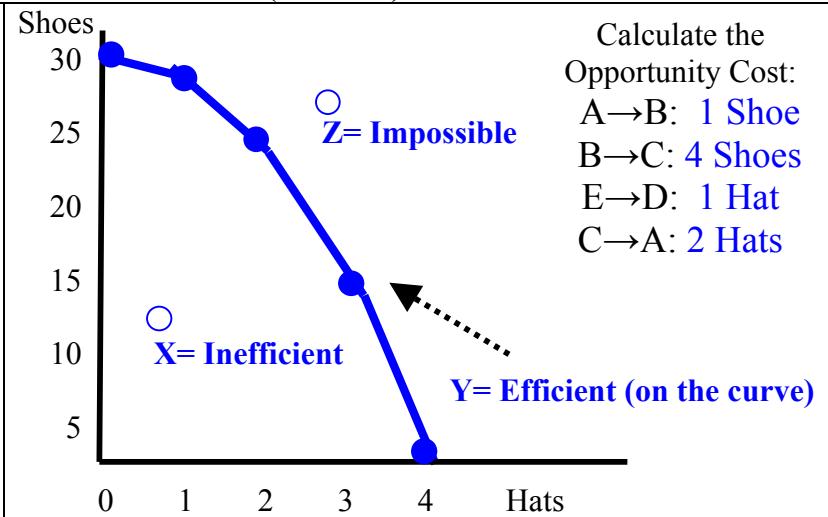
Production Possibilities Curve (Frontier)

Use the chart to create a PPC to the right.

	A	B	C	D	E
Hats	0	1	2	3	4
Shoes	30	29	25	15	0

Label the following three points on the graph:

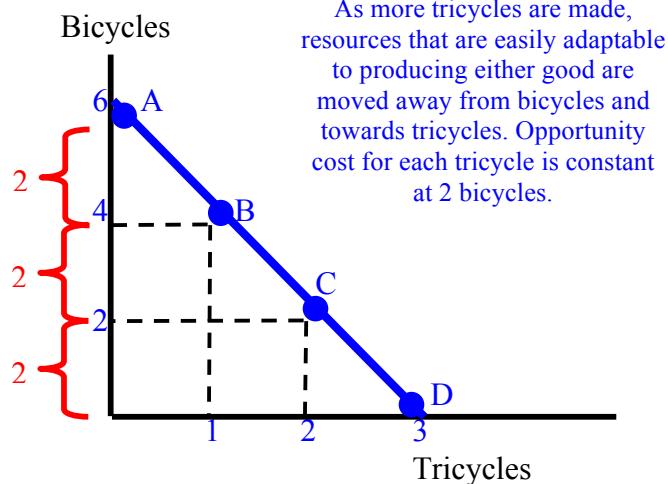
- X= Unemployment/Inefficiency
- Y= Efficient
- Z= Impossible given current resource



Constant Opportunity Cost

Why does this occur? Resources are easily adaptable between both products.

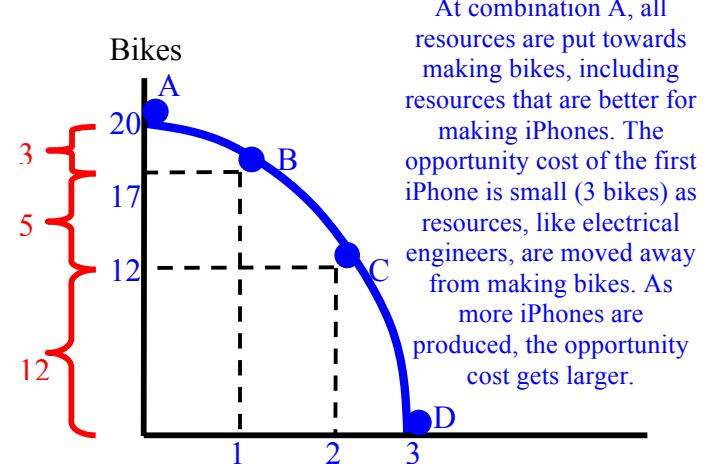
Draw the graph below



Increasing Opportunity Cost

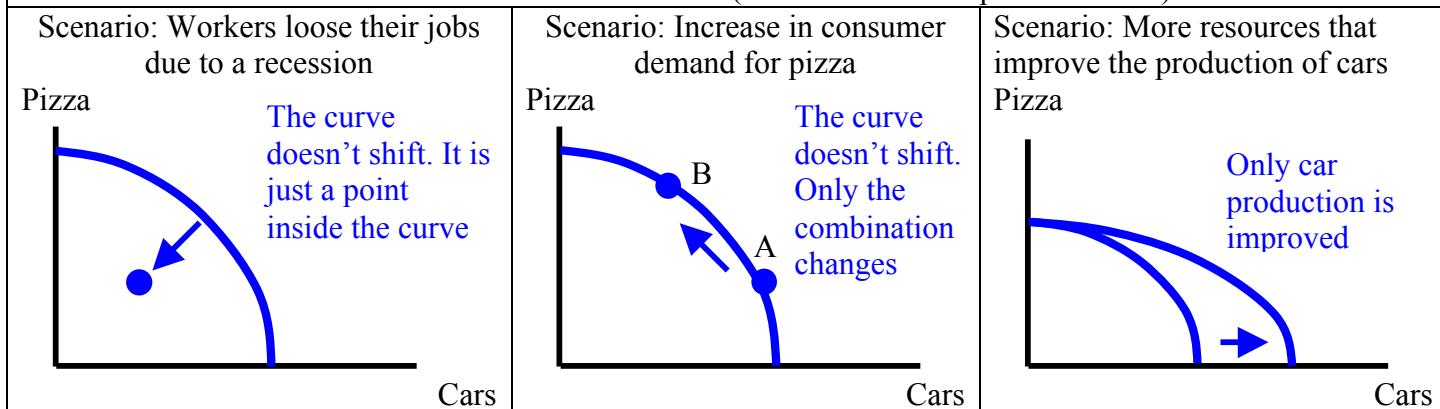
Why does this occur? Resources are not easily adaptable between both products

Draw the graph below



Efficiency	Shifting the PPC
<p>Difference between allocative and productive efficiency:</p> <p><u>Productive Efficiency</u>- Products are being produced in the least costly way (any point ON the curve)</p> <p><u>Allocative Efficiency</u>- The products being produced are the ones most desired by society. <i>Optimal</i> point depends on the desires of society.</p>	<p>Identify the three shifters of the PPC</p> <ol style="list-style-type: none"> 1. Change in resource quantity or quality 2. Change in Technology 3. Change in Trade (Doesn't change the amount they can produce, but it does change the amount they can consume)

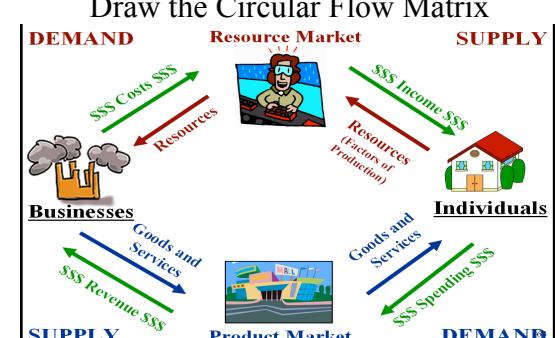
Production Possibilities Practice (draw 3 PPCs with pizza and cars)



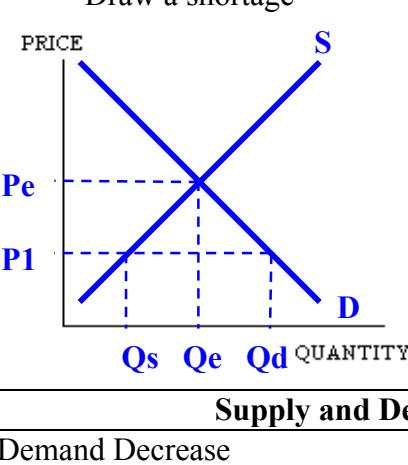
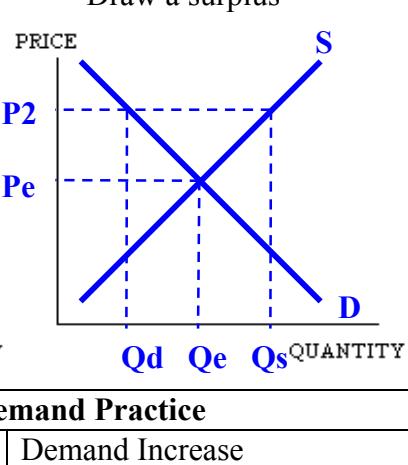
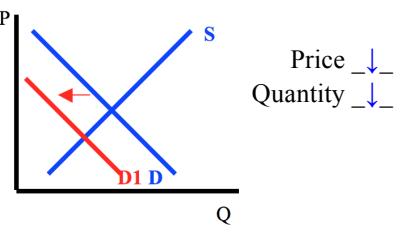
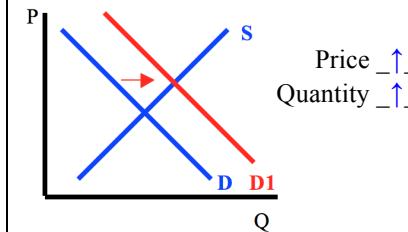
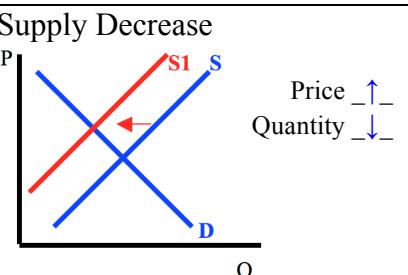
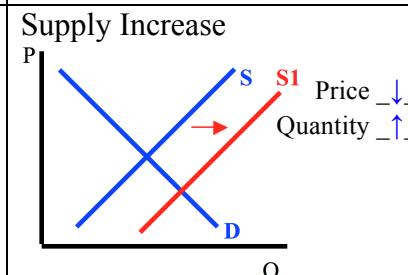
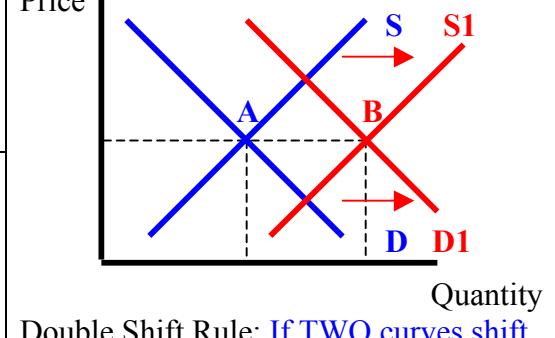
Absolute and Comparative Advantage

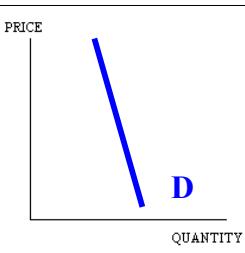
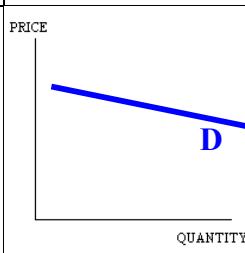
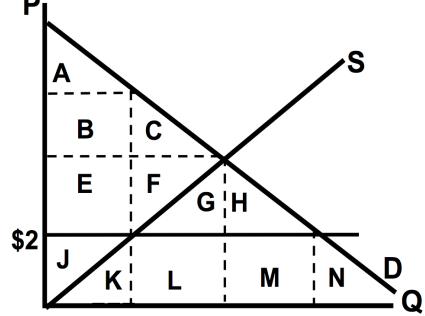
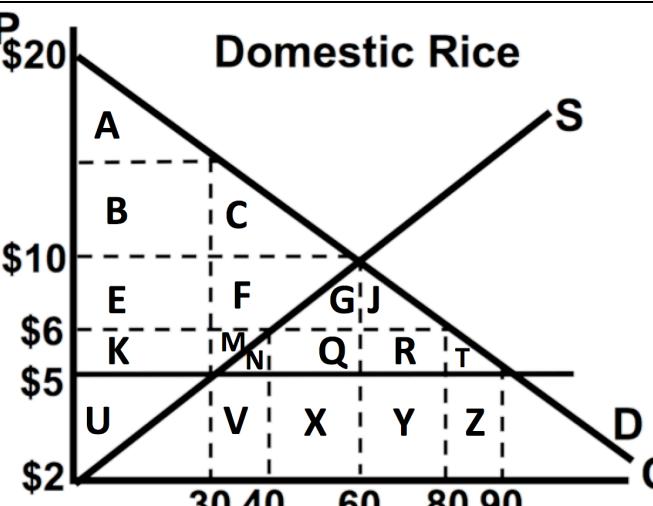
Output Questions	Input Questions																		
<p>The table shows the amount of sugar and cars each country can make with the same number of resources</p> <table border="1"> <thead> <tr> <th></th> <th>Sugar (tons)</th> <th>Cars</th> </tr> </thead> <tbody> <tr> <td>Cuba</td> <td>40 (1S costs $\frac{1}{4}$ Car)</td> <td>10 (1C costs 4 Sugar)</td> </tr> <tr> <td>Mexico</td> <td>50 (1S costs 2 Cars)</td> <td>100 (1C costs $\frac{1}{2}$ Sugar)</td> </tr> </tbody> </table> <p>1. Which country has an absolute advantage in sugar? How about cars? Mexico/Mexico</p> <p>2. What is Cuba's opportunity cost for producing one car? 4 sugar</p> <p>3. Which country has a comparative advantage in cars? How about sugar? Mexico/Cuba</p> <p>4. For both countries to benefit from trade, how much sugar can be traded for each car? 1 Car for 1 Sugar (any number between 4 and $\frac{1}{2}$)</p>		Sugar (tons)	Cars	Cuba	40 (1S costs $\frac{1}{4}$ Car)	10 (1C costs 4 Sugar)	Mexico	50 (1S costs 2 Cars)	100 (1C costs $\frac{1}{2}$ Sugar)	<p>The table shows the number of hours it takes to produce a ton of sausage and a ton of computers</p> <table border="1"> <thead> <tr> <th></th> <th>Sausage</th> <th>Computers</th> </tr> </thead> <tbody> <tr> <td>Canada</td> <td>2 (1S costs $\frac{1}{3}$ comp)</td> <td>6 (1C costs 3 sausg)</td> </tr> <tr> <td>UK</td> <td>10 (1S costs 1 comp)</td> <td>10 (1C costs 1 sausg)</td> </tr> </tbody> </table> <p>1. Which country has an absolute advantage in sausage? How about computers? Canada/Canada</p> <p>2. What is Canada's opportunity cost for producing one computer? 3 sausage</p> <p>3. Which country has a comparative advantage in computers? How about sausage? UK/Canada</p> <p>4. For both countries to benefit from trade, how many sausages can be traded for each computer? 1 comp for 2 sausage (any number between 3 and 1)</p>		Sausage	Computers	Canada	2 (1S costs $\frac{1}{3}$ comp)	6 (1C costs 3 sausg)	UK	10 (1S costs 1 comp)	10 (1C costs 1 sausg)
	Sugar (tons)	Cars																	
Cuba	40 (1S costs $\frac{1}{4}$ Car)	10 (1C costs 4 Sugar)																	
Mexico	50 (1S costs 2 Cars)	100 (1C costs $\frac{1}{2}$ Sugar)																	
	Sausage	Computers																	
Canada	2 (1S costs $\frac{1}{3}$ comp)	6 (1C costs 3 sausg)																	
UK	10 (1S costs 1 comp)	10 (1C costs 1 sausg)																	

Circular Flow Matrix (Model)

<p>Product Market- Places where individuals buy goods and services from businesses</p> <p>Factor (Resource) Market- Places where businesses buy the factors (land, labor, capital) from individuals</p> <p>Factor Payments- Payments made by businesses. Rent for land, wages for labor, interest for capital</p> <p>Transfer Payments- Payments made by the government to meet a specific goal rather than pay for goods and services (ex: welfare)</p>	<p>Draw the Circular Flow Matrix</p>  <p>The diagram illustrates the circular flow of economic activity. It features four main nodes: Businesses, Resource Market, Product Market, and Individuals. Arrows show the flow of money (\$\$\$) and goods/services. In the Resource Market, Businesses supply factors to the Resource Market, which then supply factors to the Product Market. In the Product Market, Businesses supply goods/services to Individuals, who then supply spending (\$\$\$) back to the Product Market. The Resource Market also receives income (\$\$\$) from Individuals. The Product Market receives revenue (\$\$\$) from Businesses and sends goods/services to Individuals.</p>
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Did you pay for this? If not, you're a jerk

Microeconomics Unit 2: Demand, Supply, and Consumer Choice	
Demand	Supply
The Law of Demand: Inverse relationship between price and quantity demanded P \uparrow Qd \downarrow P \downarrow Qd \uparrow	The Law of Supply: Direct relationship between price and quantity supplied P \uparrow Qs \uparrow P \downarrow Qs \downarrow
What is the difference between a change in quantity demanded and a change in demand?	
A change in quantity demanded is movement along the curve due to a change in price. A change in demand is when the entire demand curve shifts left or right due to a change in one of the shifters	
Changes in Demand and Supply (Shifting the Curve)	
What changes demand? (5 Shifters of Demand) 1. Tastes and preferences 2. Number of consumers 3. Price of related goods- Substitutes and complements 4. Income 5. Future expectations	What changes supply? (5 Shifters of Supply) 1. Prices/availability of inputs (resources) 2. Number of producers 3. Technology 4. Government action: taxes & subsidies 5. Expectations of future profit
Substitutes: Price of A \uparrow Demand for B \uparrow Price of A \downarrow Demand for B \downarrow	Normal Goods: Income \uparrow Demand \uparrow Income \downarrow Demand \downarrow
Complements: Price of A \uparrow Demand for B \downarrow Price of A \downarrow Demand for B \uparrow	Inferior Goods: Income \uparrow Demand \downarrow Income \downarrow Demand \uparrow
Equilibrium and Disequilibrium	
Draw a shortage 	Draw a surplus 
Supply and Demand Practice	
Demand Decrease 	Demand Increase 
Supply Decrease 	Supply Increase 
Double Shift Practice	
If demand increases AND supply increases then price <u>indeterminate</u> and quantity <u>increases</u> 	
Double Shift Rule: If TWO curves shift at the same time, EITHER price or quantity will be indeterminate.	

Inelastic Demand	Elastic Demand	Total Revenue Test
 Characteristics <ul style="list-style-type: none"> 1. Necessity 2. Few Substitutes 3. Elasticity coefficient less than 1 	 Characteristics <ul style="list-style-type: none"> 1. Luxury 2. Many Substitutes 3. Elasticity coefficient greater than 1 	Inelastic Demand Price ↑, TR ↑ Price ↓, TR ↓ Elastic Demand Price ↑, TR ↓ Price ↓, TR ↑
Elasticity of Demand Coefficient		Elasticity of Supply Coefficient
Equation- <u>Percent change in quantity demanded</u> <u>Percent change in price</u> Perfectly Inelastic = 0 Relatively Inelastic = Less than 1 Unit Elastic = 1 Relatively Elastic = Greater than 1 Perfectly Elastic = ∞		Equation- <u>Percent change in quantity supplied</u> <u>Percent change in price</u> Perfectly Inelastic = 0 Relatively Inelastic = Less than 1 Unit Elastic = 1 Relatively Elastic = Greater than 1 Perfectly Elastic = ∞
Cross-Price Elasticity of Demand		Income Elasticity of Demand
Definition- Shows what happens to one product when the price changes for a different product Equation- <u>Percent change in quantity of product A</u> <u>Percent change in price of product B</u> Positive: Substitute Negative: Complement		Definition- Shows what happens to a product when there is a change in income Equation- <u>Percent change in quantity</u> <u>Percent change in income</u> Positive Normal good Negative Inferior good
Consumer Surplus (CS) and Producer Surplus (PS)		
Consumer Surplus (CS)- Difference between how much people are willing to pay and the price they do pay Producer Surplus (PS)- Difference between the price and how much the seller is willing to sell the product for Deadweight Loss (DWL)- Lost efficiency when the optimal quantity is not being produced	Identify at equilibrium 1. CS- ABC 2. PS- EFJ 3. DWL- None Identify when there is a price ceiling at \$2 4. CS- ABE 5. PS- J 6. DWL- CF	
Welfare Economics and International Trade		
The graph shows the domestic market for rice. Identify and calculate the following at equilibrium 1. Consumer surplus- ABC = $(\$10 \times 60)/2$ 2. Producer surplus- EFKMU = \$240 3. Total surplus- ABCFKMU = \$540 Identify the following if this country buys rice from other countries for \$5 4. Quantity produced domestically- 30 units 5. Quantity imported- 60 units = $(90 - 30)$ 6. Consumer surplus- ABCFGJKMNQRT 7. Producer surplus- U Identify if the government places a tariff of \$1 8. Consumer surplus- ABCEFGJ 9. Tariff revenue- QR = \$40 ($\1×40 units) 10. Deadweight Loss- NT Text	Domestic Rice 	

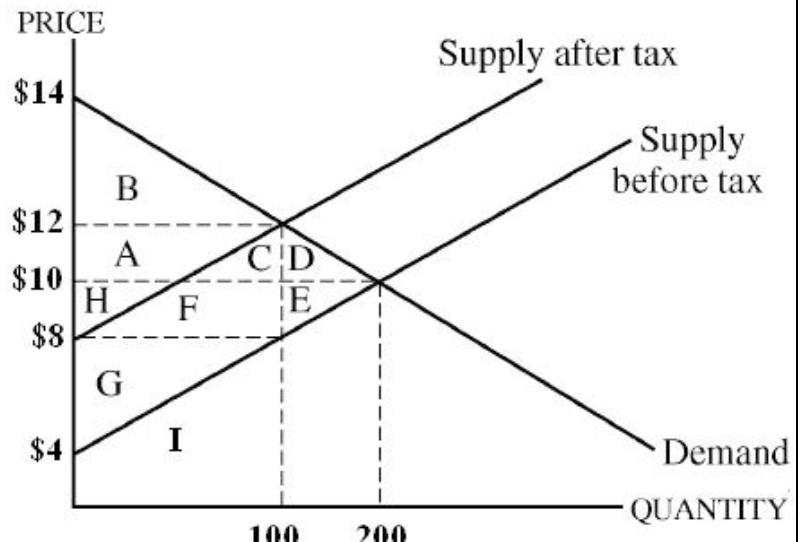
Excise Tax Practice

Before tax

1. CS before tax: **BACD**
2. PS before tax: **GHFE**

After Tax

3. Tax per unit: **\$4 Per Unit**
4. CS after tax: **B**
5. PS after tax: **G**
6. Dead weight loss: **DE**
7. Total tax revenue to gov: **ACHF**
8. Total spending by buyers: **ACHFGI**
9. Total revenue to sellers: **GI**
10. Total amount of tax buyer pay: **AC**
11. Total amount of tax sellers pay: **HF**
12. Is the demand curve between \$12 and \$10 elastic, inelastic, or unit elastic?
Elastic. Price fell and total revenue went up



Consumer Choice and Maximizing Utility

Utility Maximizing Rule:

$$\frac{\text{Marginal Utility of A}}{\text{Price of A}} = \frac{\text{Marginal Utility of B}}{\text{Price of B}}$$

You can choose any combination of two different activities, the movies (\$10) or riding go carts (\$5).

1. If you only have \$25, what combination maximizes your utility? **2 movies and 1 go cart because you pick the one that gives you the most additional utility per dollar until all the money is spent.**

2. What combo is best if you have \$40?

3 Movies and 2 Go Cart

# Times Going	Marginal Utility (Movies)	MU/P	Marginal Utility (Go Carts)	MU/P
1st	30	3	10	2
2nd	20	2	5	1
3rd	10	1	2	.4
4th	5	.5	1	.2

3. What is the total utility from consuming 3 movies and 2 go carts? **75 utils = 30+20+10+10+5**

...on second thought, don't punch them. E-mail me their name and address. I'll take care of it.

Unit 3: Costs of Production and Perfect Competition

Production and the Law of Diminishing Marginal Returns

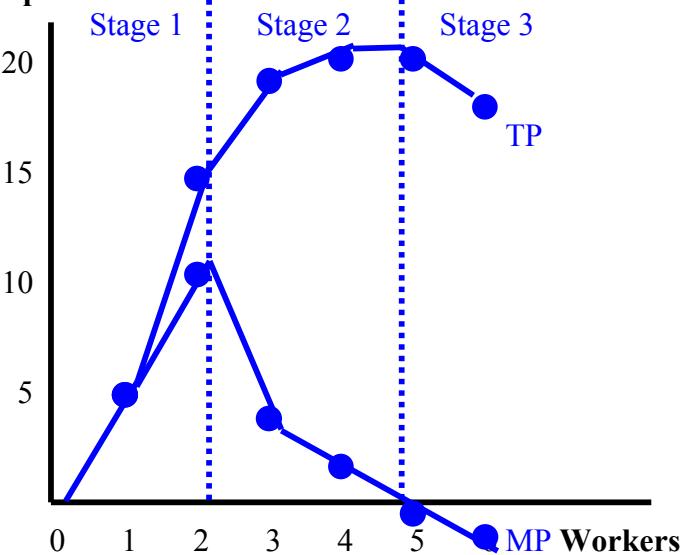
Calculate MP. Plot TP and MP on Graph

Number of Workers	Total Product	Marginal Product
0	0	-
1	5	5
2	15	10
3	19	4
4	20	1
5	20	0
6	18	-2

Define the Law of Diminishing Marginal Returns
As variable resources are added to fixed resources, the additional output from each new worker will eventually fall.

After which worker does diminishing marginal returns set in? After the 2nd Worker

Output



Identify the three stages of returns: increasing, decreasing, and negative marginal returns

Revenue and Costs (Define the following)

Total Revenue-

$$\text{Price} \times \text{Quantity}$$

Accounting Profit-

$$\text{Total Revenue} - \text{Explicit Costs}$$

Economic Profit-

$$\text{Total Revenue} - \text{Explicit and Implicit Costs}$$

Normal Profit-

Zero Economic Profit (breaking even)

Fixed Cost (FC)- Costs that DON'T change as you produce more (ex: rent, insurance, etc.)

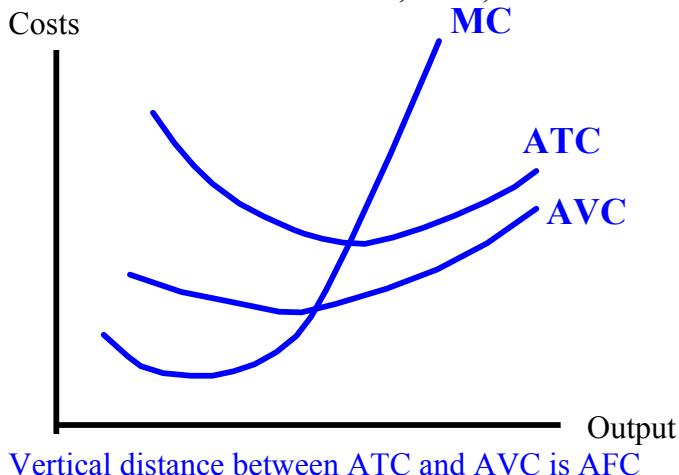
Variable Cost (VC)- Costs that DO change as you produce more (wages to workers, raw materials, etc.)

Total Cost (TC)- Fixed Costs + Variable Costs

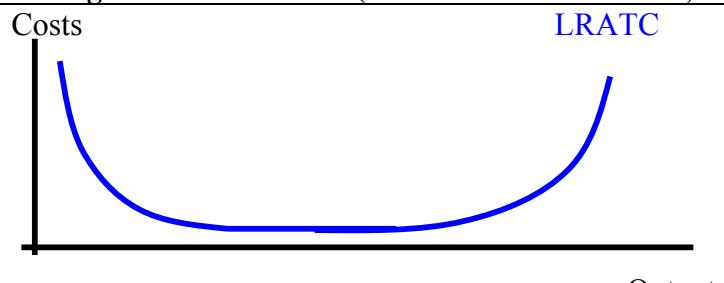
Marginal Cost (MC)- Additional cost to produce one additional output.

Short Run Cost Curves (at least one fixed resource)

Draw and Label ATC, AVC, and MC



Long-Run Cost Curves (all resources are variable)



Economies of Scale- Long run average total cost (LRATC) falls because mass production techniques are used.

Diseconomies of Scale- Long run average total cost (LRATC) increase as the firm gets too big and difficult to manage.

If your teacher or professor gave this to you without paying they are a jerk

Calculating ATC, AVC, AFC, and MC

Fill in the blanks for a firm producing boxes of oranges:

Output (boxes)	Variable Cost	Total Cost	AVC	AFC	ATC	MC
0	\$0	\$10	-	-	-	-
1	20	\$30	\$20	\$10	\$30	\$20
2	30	\$40	\$15	\$5	\$20	\$10
3	60	\$70	\$20	\$3.3	\$23	\$30
4	100	\$110	\$25	\$2.5	\$27	\$40

Assume this firm is in a perfectly competitive market and the price is \$35 for each box.

- How many boxes should they produce? Why? 3 Boxes of Oranges, Firms should produce as long as the additional revenue of a unit is greater than the additional cost. To maximize profit, produce where $MR = MC$
- Calculate the profit at that quantity $TR = \$105$ and $TC = \$70$, Profit = \$35

Shut Down Point

Shut Down Rule: A firm should shut down if the price fall below the minimum AVC
 Short-Run Supply Curve: The MC curve above minimum AVC

Per-Unit vs. Lump-Sum

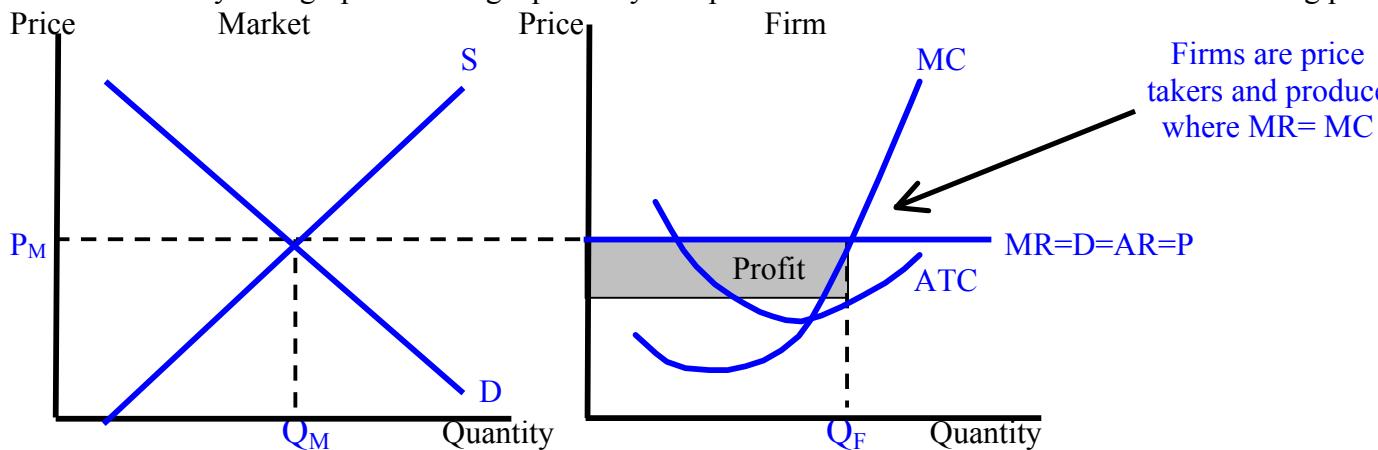
- A per unit tax shifts MC, AVC, and ATC so quantity will Change (decrease).
- A lump sum tax shifts AFC and ATC so quantity will NOT change.

Characteristics of Perfect Competition

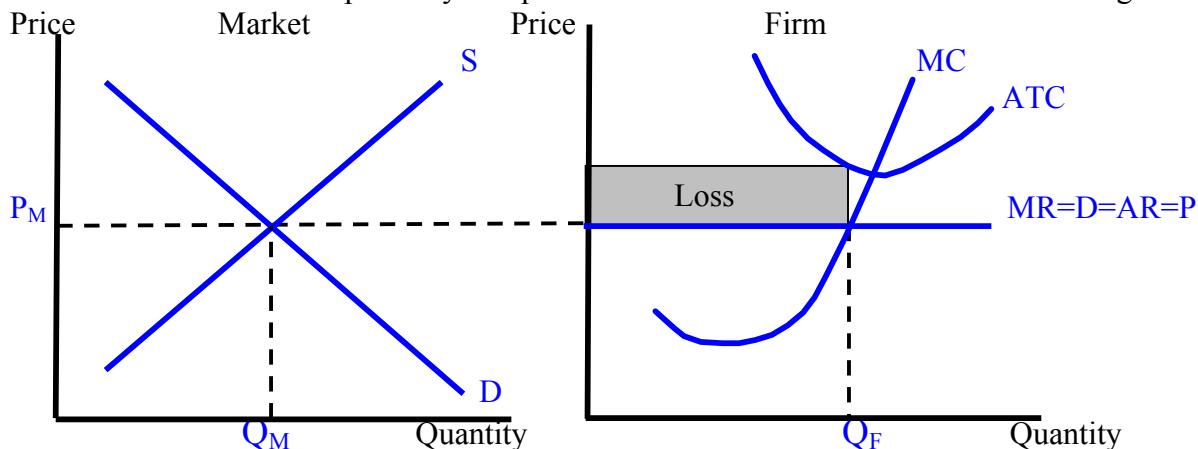
- Many small firms
- Identical products
- No barriers to entry
- No control over the price
- No economic profit in long run
- Efficient

Graphing Perfect Competition

Draw side-by-side graphs showing a perfectly competitive market and firm. Draw the firm making profit



Draw a perfectly competitive market and a firm with the firm making a loss



If a friend gave you this, they are a jerk, and technically a thief.

Calculation Practice

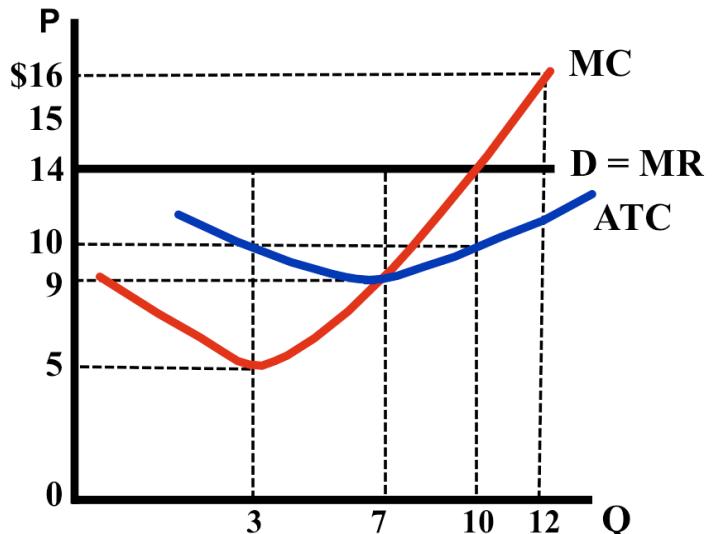
Assume the price is \$14 and the firm produces the profit maximizing quantity. Identify the following:

1. Quantity- 10 units ($MR=MC$)
2. Total revenue- $\$140 = \14×10 units
3. Total cost- $\$100 = \10×10 units
4. Economic profit- $\$40 = \$140 - \$100$
5. What will happen to the number of firms in the market in the long run? Increase, firms will enter

Assume the market adjust to the long run. Identify:

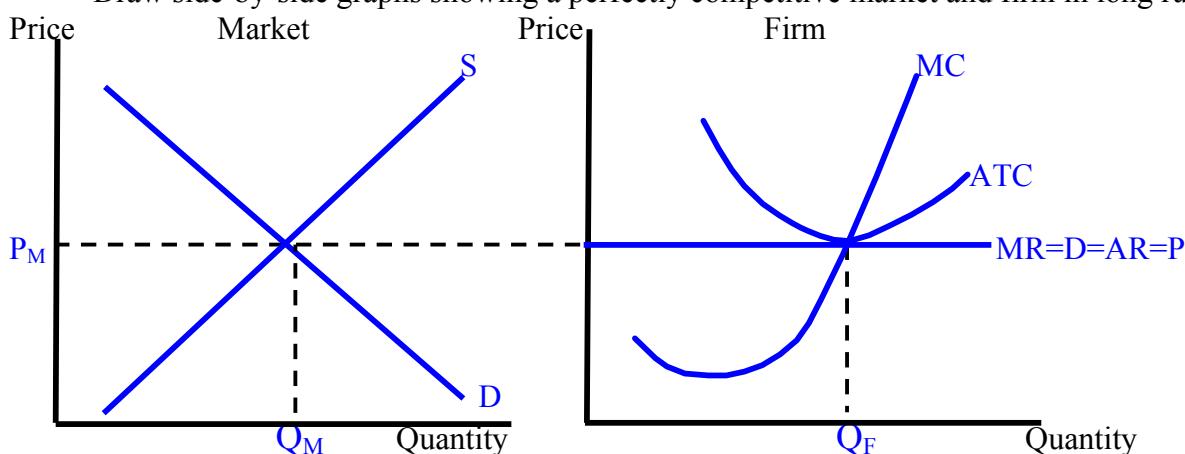
6. Price- \$9 (No economic profit, minimum ATC)
7. Quantity- 7 Units ($MR=MC$)
8. What will happen to number of firms in the market? Not change. No incentive to enter or leave

If the price was \$5, should the firm shut down in the short run? Can't tell, need an AVC curve to know



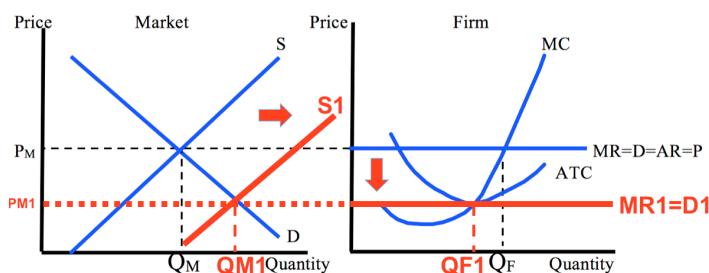
Perfect Competition in the Long Run

Draw side-by-side graphs showing a perfectly competitive market and firm in long run equilibrium



From Short Run to Long Run

Draw what happens to each graph in the long run



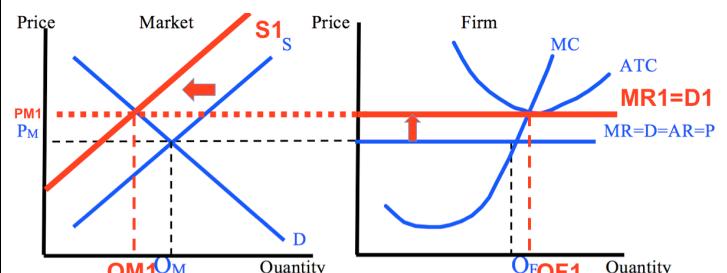
Market:

Price \downarrow Quantity \uparrow

Firm:

Price \downarrow Quantity \downarrow

Draw what happens to each graph in the long run



Market:

Price \uparrow Quantity \downarrow

Firm:

Price \uparrow Quantity \uparrow

Efficiency in the Long Run

In the long run, perfectly competitive firms have both types of efficiency:

1. Productive Efficiency: they produce the quantity that is the lowest cost (Minimum ATC)
2. Allocative Efficiency: they produce the optimal quantity that society wants (Price = MC)

Seriously, thank you for buying this packet man

Did you buy this packet? You did! Ok, we're cool

Unit 4: Imperfect Competition

Characteristics of the Four Market Structures

Perfect Competition

- Many small firms
- Identical products
- Easy to enter and exit
- No need to advertise
- Firms are “Price Takers”

Monopolistic Competition

- Large number of sellers
- Differentiated products
- Easy to enter and exit
- A lot of non-price competition
- Some control over price

Oligopoly

- A Few Large Firms (Less than 10)
- High Barriers
- Control Over Price
- Mutual Interdependence

Monopoly

- One firm
- Unique product
- High barriers to enter and exit
- Price Maker

Demand and Marginal Revenue

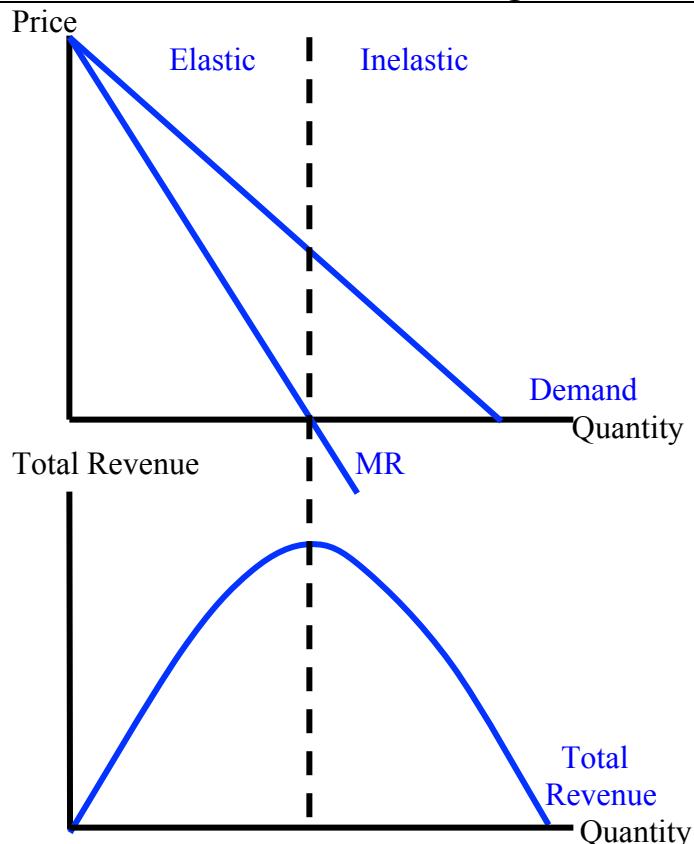
Why is demand greater than marginal revenue for all imperfectly competitive firms?

To sell another unit, the firm must lower the price of the next unit and the units it could have sold at a higher price. (It cannot price discriminate)

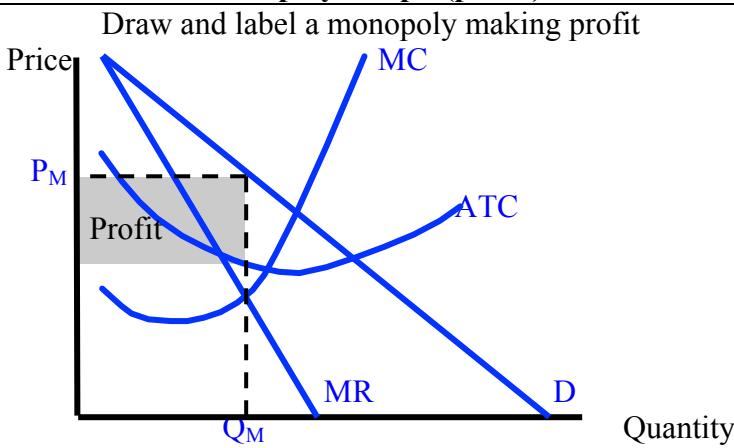
Why are monopolies inefficient?

1. Price is too high
2. Quantity is too low
3. They cause deadweight loss ($P > MC$)

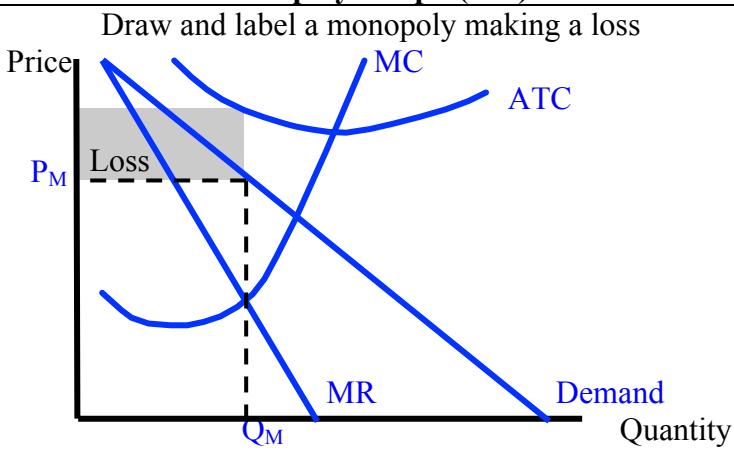
Elastic and Inelastic Range



Monopoly Graph (profit)



Monopoly Graph (loss)



Barriers to Entry

Identify four common barriers that allow companies to gain and maintain market power

1. Economies of Scale
2. Control of Scarce Resources
3. Governmental or Legal Barriers
4. Technological Superiority

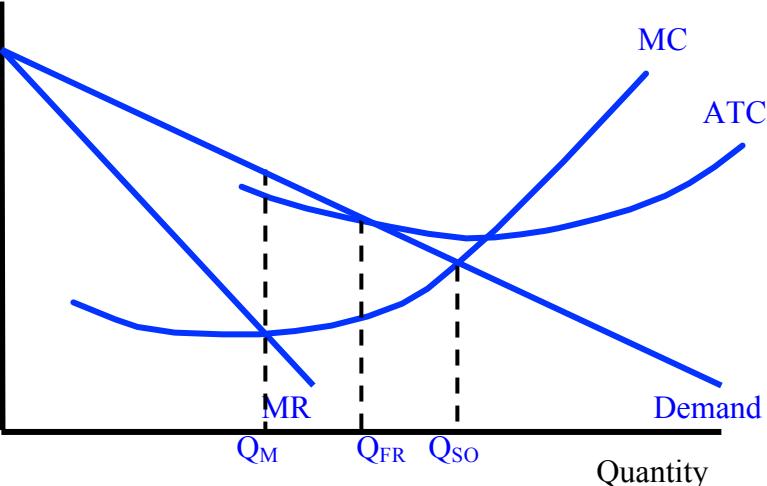
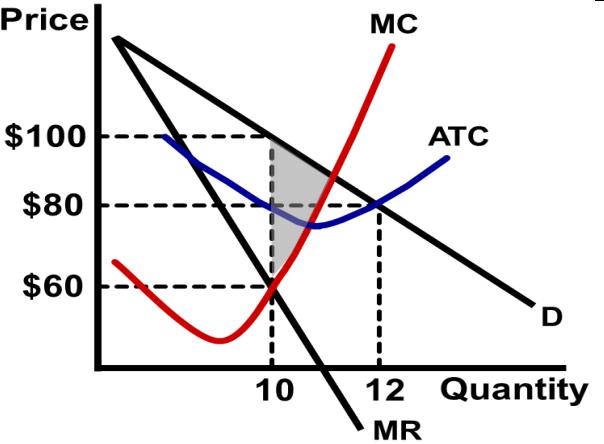
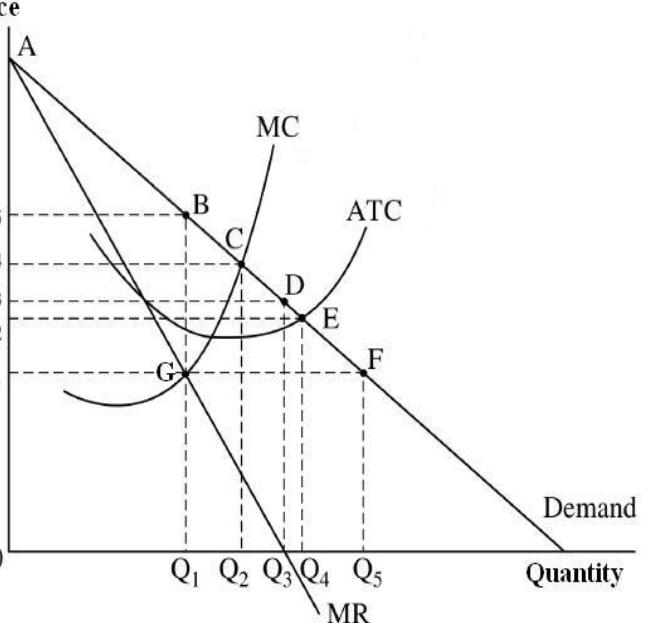
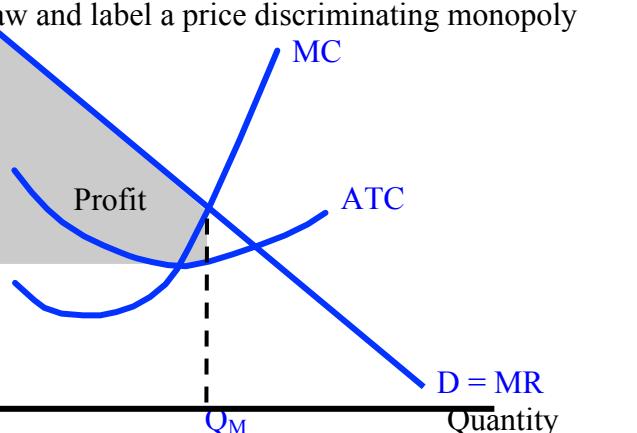
Natural Monopolies

What is a natural monopoly?

An industry where it is cheaper and more efficient to have a monopoly rather than several smaller competing firms. Example: electric companies

If your teacher gave you this without paying, they are a jerk

Did you buy this packet? You did! Ok, we're cool

Regulating Monopolies	Calculation Practice
<p>Draw a natural monopoly. Identify: unregulated quantity (Q_M), socially optimal quantity (Q_{SO}) and fair return quantity (Q_{FR})</p>  <p>Price</p> <p>Quantity</p> <p>MC</p> <p>ATC</p> <p>Demand</p> <p>MR</p> <p>Q_M Q_{FR} Q_{SO}</p>	 <p>Price</p> <p>\$100</p> <p>\$80</p> <p>\$60</p> <p>Quantity</p> <p>MC</p> <p>ATC</p> <p>D</p> <p>MR</p> <p>10 12</p> <p>1. If this monopoly is unregulated, what is the total revenue, total cost, and profit? $TR = \\$1000, TC = \\$800, Profit = \\$200$</p> <p>2. Shade in Deadweight loss See above</p>
Monopoly Practice	
 <p>Price</p> <p>A</p> <p>P₅</p> <p>P₄</p> <p>P₃</p> <p>P₂</p> <p>P₁</p> <p>0</p> <p>Quantity</p> <p>MR</p> <p>MC</p> <p>ATC</p> <p>Demand</p> <p>Q_1 Q_2 Q_3 Q_4 Q_5</p> <p>B C D E F G</p>	<p>If this was competitive market</p> <ol style="list-style-type: none"> 1. Price and quantity: P_4, Q_2 2. Consumer surplus: ACP_4 <p>If this is an unregulated monopoly</p> <ol style="list-style-type: none"> 3. Price and quantity: P_5, Q_1 4. Consumer surplus: ABP_5 5. Deadweight loss: BCG 6. Quantity total revenue maximized: $Q_3 \text{ } MR=0$ 7. Quantity if it perfectly price discriminates: Q_2 8. Elastic range of the demand curve: AD 9. If the government placed a per unit tax on this monopoly then price \uparrow and quantity \downarrow 10. If the government placed a lump sum subsidy on this monopoly then price <u>same</u> and quantity <u>same</u>. (Lump sum subsidies don't shift MC)
Price Discrimination	Perfectly Price Discriminating Monopoly
<p>Identify the three conditions necessary for a firm to price discriminate</p> <ol style="list-style-type: none"> 1. The firm must not be a price taker 2. The firm must be able to segregate the market and identify consumers that are willing to pay more 3. The firm must be able to make sure consumers cannot resell the product to other consumers <p>If a regular unregulated monopoly started perfectly price discriminating, what would happen to consumer surplus and deadweight loss?</p> <p>There would be no consumer surplus and no deadweight loss</p>	<p>Draw and label a price discriminating monopoly</p>  <p>Price</p> <p>MC</p> <p>ATC</p> <p>D = MR</p> <p>Profit</p> <p>Q_M</p> <p>Quantity</p>

Did you buy this packet? You did! Ok, we're cool

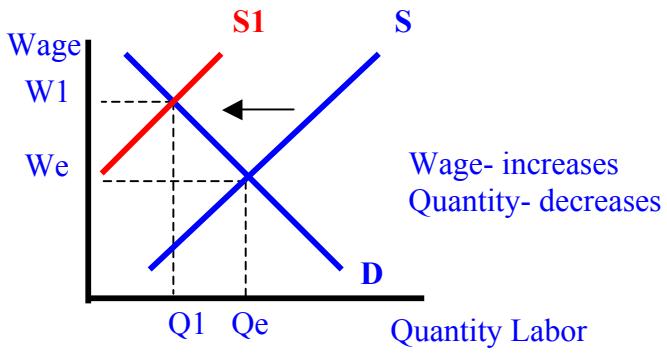
Oligopolies and Game Theory											
<p>1. If David decides to advertise now and Lindsey decides to do it later, what is David's expected profit? \$1000</p> <p>2. What is Lindsey's dominant strategy? Now</p> <p>3. What is David's dominant strategy? None</p> <p>4. If both owners have the information but do not actively collude, what will be the outcome? Both will choose Now</p> <p>Assume the advertising company offers a deal that increases the profit for both owners by \$2,000 but only if they advertise later. Based on these changes:</p> <p>5. What is Lindsey's dominant strategy? None</p> <p>6. What is David's dominant strategy? Later</p>	<p>Assume that two business owners are deciding between advertising now and advertising later. The chart shows expected profit with Lindsey's on the left</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td></td><td style="text-align: center;">David</td></tr> <tr> <td></td><td>Now Later</td></tr> <tr> <td style="vertical-align: top;">Now</td><td style="text-align: center;">\$5,000, \$4,000 \$3,000, \$3,500</td></tr> <tr> <td style="vertical-align: top;">Lindsey</td><td></td></tr> <tr> <td style="vertical-align: top;">Later</td><td style="text-align: center;">\$900, \$1,000 \$1,500, \$1,800</td></tr> </table>		David		Now Later	Now	\$5,000, \$4,000 \$3,000, \$3,500	Lindsey		Later	\$900, \$1,000 \$1,500, \$1,800
	David										
	Now Later										
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Lindsey											
Later	\$900, \$1,000 \$1,500, \$1,800										
Kinked Demand Curve	Nash Equilibrium										
<p>Draw non-colluding oligopoly</p>	<p>Definition of Nash Equilibrium - The optimal outcome where neither player can make themselves better off by deviating from the current strategy</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td></td><td style="text-align: center;">Firm 2</td></tr> <tr> <td></td><td>High Low</td></tr> <tr> <td style="vertical-align: top;">High</td><td style="text-align: center;">\$100, \$50 \$60, \$90</td></tr> <tr> <td style="vertical-align: top;">Firm 1</td><td></td></tr> <tr> <td style="vertical-align: top;">Low</td><td style="text-align: center;">\$50, \$40 \$20, \$10</td></tr> </table>		Firm 2		High Low	High	\$100, \$50 \$60, \$90	Firm 1		Low	\$50, \$40 \$20, \$10
	Firm 2										
	High Low										
High	\$100, \$50 \$60, \$90										
Firm 1											
Low	\$50, \$40 \$20, \$10										
Monopolistic Competition											
<p>Draw a Mono. Comp. firm in long-run equilibrium</p> <p>$P = ATC$, No economic profit in the long-run</p>	<p>Excess Capacity (define below and label on graph) The gap between the minimum ATC output and the profit maximizing output.</p> <p>Given current resources, the firm can produce at the lowest costs (minimum ATC) but they decide not to. If a monopolistically competitive firm is making a profit in the short-run, what will happen to the demand and number of firms in the long run?</p> <ul style="list-style-type: none"> • New firms enter to make profit • Firms must share same amount of consumers • Demand for each firm falls until each firm makes no economic profit 										
<p>What are examples of non-price competition?</p> <ul style="list-style-type: none"> • Brand names or packaging • Product attributes • Service • Location 	<p>What are the two goals of advertising?</p> <ol style="list-style-type: none"> 1. Increase the demand for the product or service 2. Make the demand more inelastic 										

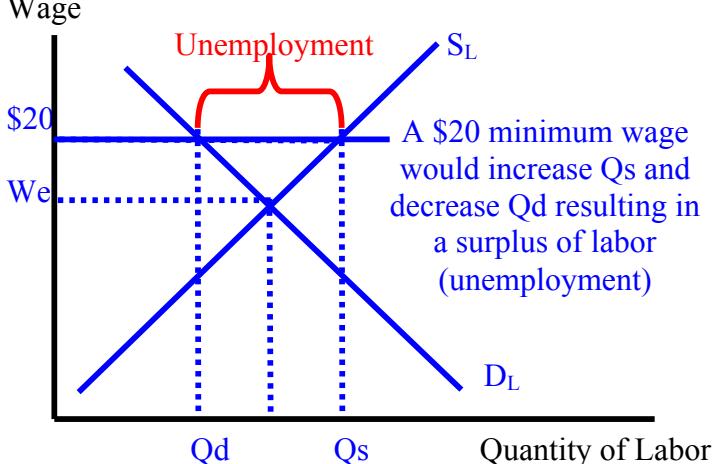
Dude. please don't post this online

Unit 5: The Resource Market

Define Key Terms

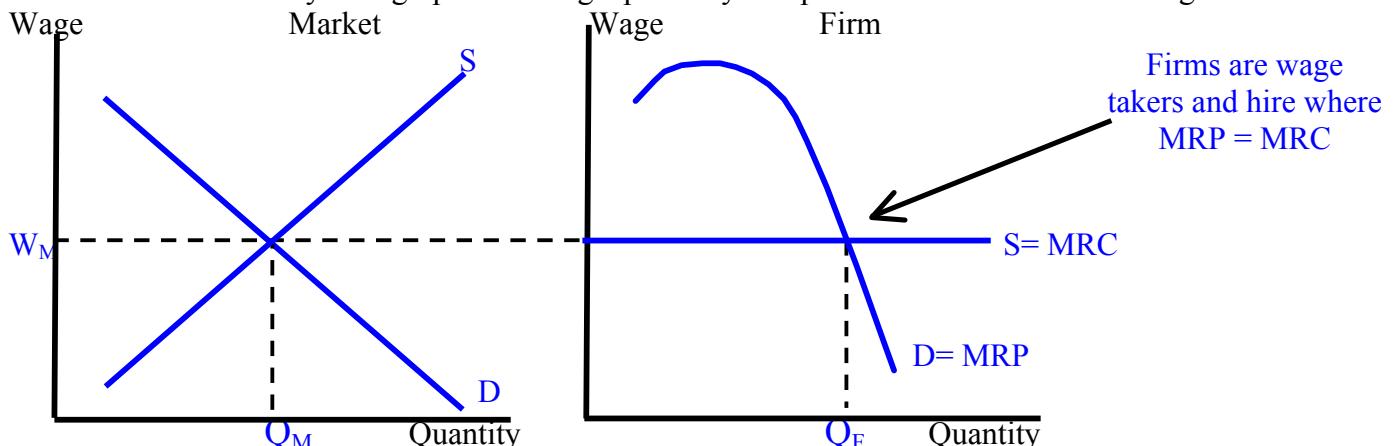
The Resource (Factor) Market- All markets where the factors of production (land, labor, capital) are sold by households to businesses Demand for Labor- The number of workers that businesses are willing and able to hire at different wages Supply for Labor- The number of workers that are willing and able to sell their labor at different wages	Derived Demand- The demand for resources is determined (derived) by the products they help produce. (ex: the demand for carpenters is derived by the demand of homes) Marginal Revenue Product (MRP)- The additional revenue generated by an additional resource (worker). Marginal Resource Cost (MRC)- The additional cost of an additional resource (worker)
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Demand and Supply for Labor	Resource Shifters and Equilibrium
Draw a competitive market for plumbers. Label the equilibrium wage and quantity  <p style="text-align: center;">Wage ↑ ↓ Wage</p> <p style="text-align: center;">Q1 Qe Qs Quantity Labor</p> <p style="text-align: right;">Wage- increases Quantity- decreases</p> Assume the government establishes a certification process that makes it harder to be a plumber. Show on the graph what will happen to the wage and quantity	Shifters of Labor Demand- 1. Change in the demand for the product 2. Change in the productivity of the resource 3. Change in the price of related resources (substitute and complementary resources) Shifters of Labor Supply- 1. Number of qualified workers 2. Government regulation/licensing 3. Personal values regarding leisure and societal roles If the equilibrium wage for electricians is \$15 an hour and the government established a minimum wage of \$10 an hour, what will happen to the wage and quantity? They will stay the same. The minimum wage is below equilibrium and is not binding for electricians

Minimum Wage	Labor Market Practice
Draw the results of a minimum wage. Label the quantity supplied (Qs) & the quantity demanded (Qd)  <p style="text-align: center;">Wage ↑ ↓ Wage</p> <p style="text-align: center;">\$20 We Unemployment Qd Qs Quantity of Labor</p> <p style="text-align: right;">A \$20 minimum wage would increase Qs and decrease Qd resulting in a surplus of labor (unemployment)</p>	1. If the demand for houses increases, the wage of carpenters will \uparrow and the quantity will \uparrow . 2. Assume bricks and wood are substitute resources. If the price of bricks increases, the price of wood \uparrow and the quantity \uparrow . 3. If the government removes all regulations for becoming a dentist. The wages for dentists will \downarrow and the quantity will \uparrow . 4. If demand for accountants falls at the same time that the supply increases, the wage will \downarrow and the quantity will be indeterminate . 5. Will a binding minimum wage lead to relatively less unemployment when the demand for labor is inelastic or when it is elastic? When the demand is inelastic there will be less unemployment. The quantity demanded will decrease a little since employers still need these workers

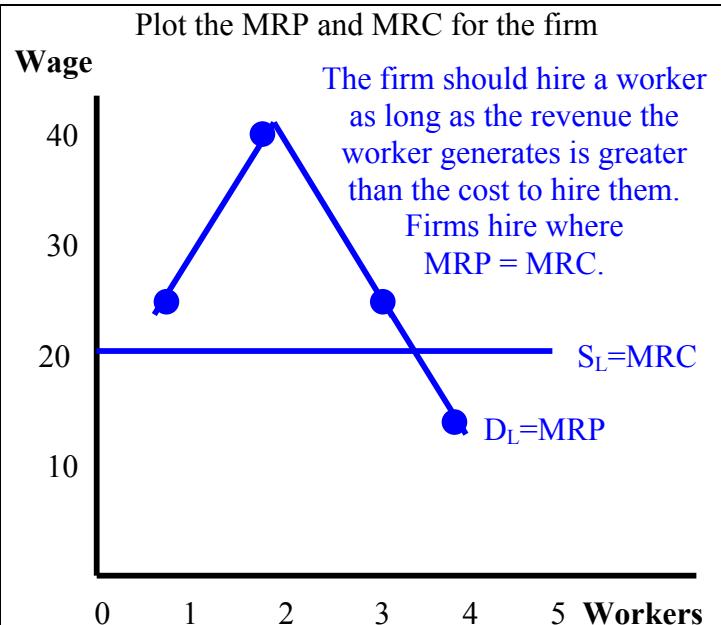
Perfectly Competitive Labor Market and Firm

Draw side-by-side graphs showing a perfectly competitive market and firm hiring workers


Calculating MRP and MRC

Number of Workers	Total Product	Marginal Product	Marginal Revenue Product
0	0	-	-
1	5	5	\$25
2	13	8	\$40
3	18	5	\$25
4	21	3	\$15
5	20	-1	\$-5

- Assume perfectly competitive product and labor markets. If the price of the product is \$5 and the wage is \$20, how many workers should be hired? **3**
- How much is the profit or loss? **$\$90 - \$60 = \$30$**
- Assume that this firm develops a process that makes only their workers more productive. The wage will stay the same and the quantity will ↑.


Combining Resources

Least cost rule when combining resources-

$$\frac{\text{Marginal Product of Labor}}{\text{Price of Labor}} = \frac{\text{Marginal Product of Capital}}{\text{Price of Capital}}$$

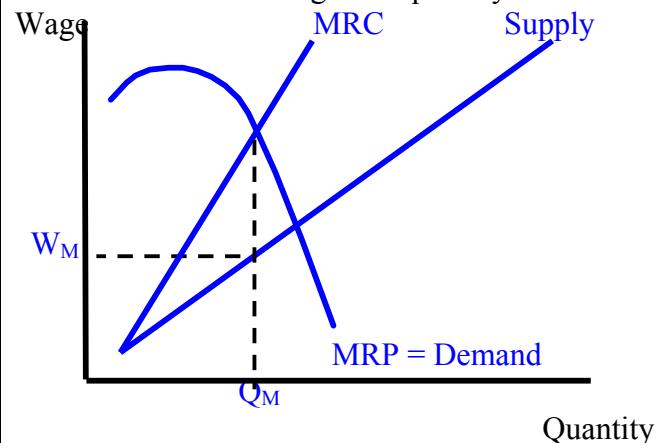
Profit maximizing rule for combining resources-

$$\frac{\text{MRP}_X}{\text{MRC}_X} = \frac{\text{MRP}_Y}{\text{MRC}_Y}$$

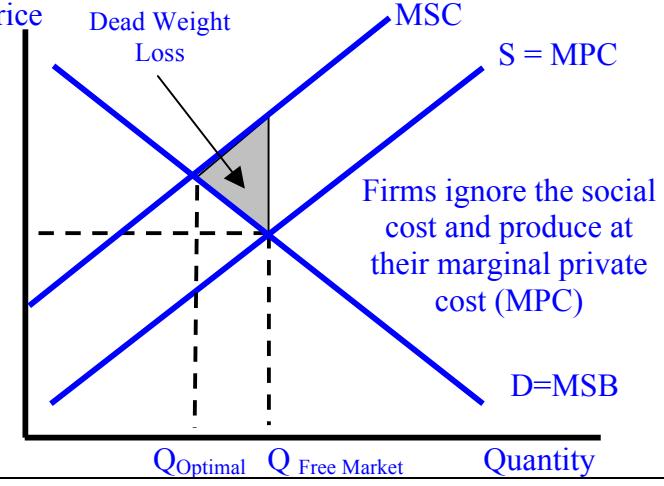
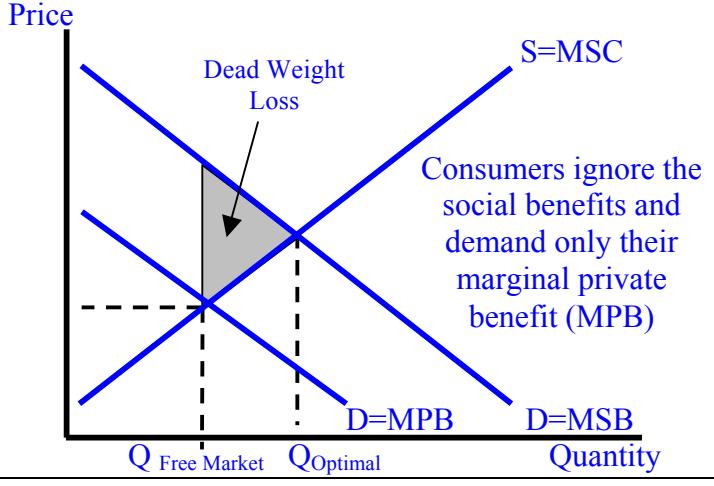
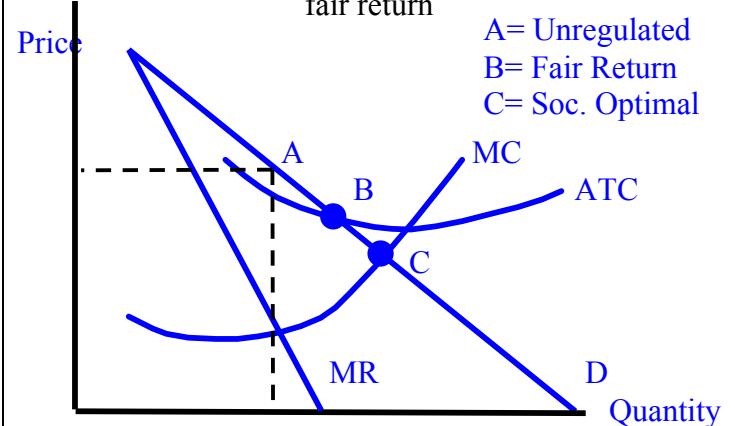
Assume a company uses two resources, workers and robots, and the MRC for each is \$20. Currently the MRP of the last worker hired is \$30 and the MRP of the last robot is \$10. The company should ↑ the number of workers and ↓ the number of robots.

Monopsony

Draw a monopsony and label the unregulated wage and quantity



Unit 6: Market Failures and the Role of the Government

Public Goods	Externalities
<p>Why are public goods a market failure? Businesses in the free-market won't provide public goods and service since they can't earn profit. If society wants them, the government needs to step in</p> <p>Two Characteristic of Public Goods:</p> <ol style="list-style-type: none"> 1. Nonexclusion-Cannot exclude benefits of the good. Everyone can use the good, even those that don't pay. 2. Shared consumption-One person's consumption of a good does not reduce the usefulness to others. <p>Maximizing Rule for Public Goods-</p> <p>Public goods should be produced as long as the additional benefit to society is greater than the additional cost. Produce where $MSB = MSC$</p>	<p>Negative Externality- A situation that results in external costs on others causing the marginal social cost to be higher than the marginal private cost</p> <p>Positive Externality- A situation that results in external benefits on others causing the marginal social benefit to be higher than the marginal private benefit</p> <p>Why are externalities a market failure? They cause markets to produce the wrong output</p> <p>Tragedy of the Commons- A lack of property rights causes individuals to uses resources in a way that is contrary to the benefits of society (example- overfishing)</p>
Negative Externalities	Positive Externalities
<p>Draw a negative externality. Label the free market quantity, optimal quantity, and deadweight loss</p>  <p>The graph shows a downward-sloping demand curve labeled $D=MSB$ and an upward-sloping supply curve labeled $S=MPC$. The intersection of these two curves determines the free market quantity $Q_{Free\ Market}$. The intersection of the supply curve $S=MSC$ and the demand curve $D=MSB$ determines the optimal quantity $Q_{Optimal}$. A shaded triangle between the vertical axis and the horizontal axis, bounded by the vertical dashed line at $Q_{Optimal}$ and the horizontal dashed line at the price level of $Q_{Free\ Market}$, represents the deadweight loss. An annotation states: "Firms ignore the social cost and produce at their marginal private cost (MPC)".</p>	<p>Draw a positive externality. Label the free market quantity, optimal quantity, and deadweight loss</p>  <p>The graph shows an upward-sloping supply curve labeled $S=MSC$ and a downward-sloping demand curve labeled $D=MSB$. The intersection of these two curves determines the free market quantity $Q_{Free\ Market}$. The intersection of the supply curve $S=MSC$ and the demand curve $D=MPB$ determines the optimal quantity $Q_{Optimal}$. A shaded triangle between the vertical axis and the horizontal axis, bounded by the vertical dashed line at $Q_{Optimal}$ and the horizontal dashed line at the price level of $Q_{Free\ Market}$, represents the deadweight loss. An annotation states: "Consumers ignore the social benefits and demand only their marginal private benefit (MPB)".</p>
Correcting Externalities	Regulating Monopolies
<p>Solutions to solve a negative externality-</p> <p>Per unit tax</p> <p>Government regulation decreasing output</p> <p>Solutions to solve a positive externality-</p> <p>Per unit subsidy</p> <p>Government regulation that increases output</p> <p>How does Coase Theorem seek to solve negative externalities?</p> <p>Coase Theorem suggests that establishing property rights and allowing the parties involved to negotiate alternatives leads to a more efficient solution (Ex: businesses buy the right to pollute up to a set limit)</p>	<p>Label a monopoly unregulated, socially optimal, and fair return</p>  <p>The graph illustrates the effect of regulation on a monopoly. It shows the Marginal Revenue (MR) curve, Marginal Cost (MC) curve, and Average Total Cost (ATC) curve. Point A is the intersection of MR and MC, representing the unregulated monopoly output. Point B is the intersection of MC and ATC, representing the fair return output. Point C is the intersection of MR and ATC, representing the socially optimal output. A horizontal dashed line from point A indicates the unregulated price level. A vertical dashed line from point C indicates the price level at the socially optimal output. The area between the price level at A and the ATC curve up to quantity C is shaded blue and labeled "Dead Weight Loss".</p> <p>A = Unregulated B = Fair Return C = Soc. Optimal</p>

Thanks for buying this packet. Seriously. Thank you!

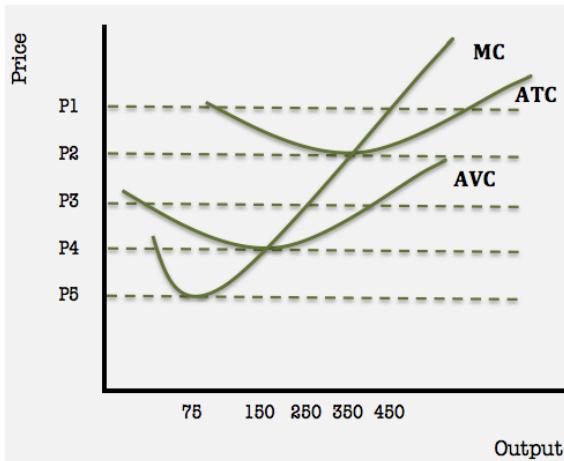
Income Inequality	
<p>What are transfer payments? Government payments to individuals or businesses designed to meet a specific objective rather than pay for goods or resources. (Ex: Welfare)</p> <p>What is the Gini Coefficient? A statistical measurement of income equality where perfect equality is 0 and perfect inequality is 1. On the graph, it is Area A divided by the sum of areas A and B.</p> <p>What would happen to the Gini Coefficient if the government increased the amount it taxes wealthier citizens and increase transfer payments to the poor? The Gini coefficient would get smaller.</p>	<p>Draw and label the Lorenz Curve showing equal distribution of income and the actual distribution</p>
Types of Taxes	Tax Incidence
<ol style="list-style-type: none"> Progressive Tax- takes a larger percent of income from high income groups (takes more percent from rich people). Proportional Tax- takes the same percent of income from all income groups. Regressive Tax- takes a larger percentage from low income groups (takes more percent from poor people). <p>Income Distribution Practice</p> <ol style="list-style-type: none"> What is the difference between income inequality and wealth inequality? Income looks at how earnings are distributed and wealth inequality looks at how assets are distributed An increase in job training for low-skilled workers would likely <u>↓</u> income inequality and cause the Gini coefficient to <u>↓</u>. 	<p>Label the amount consumers and producers pay of tax</p> <p>Who pays more of the tax:</p> <ol style="list-style-type: none"> If demand is elastic and supply is inelastic? Producers If demand is inelastic and supply is elastic? Consumers If demand is perfectly inelastic? Consumers pay all

Congratulations! You're done with microeconomics

Microeconomics
Practice Exam #1

- 1 Which of the following factors of production would best be described as human capital?
(A) money used to start a business
(B) skills and training that help workers to complete their role in producing a finished product
(C) effort put forth by human workers
(D) currency provided to businesses through subsidies and other government programs
(E) tools used to produce a finished product
- 2 Which of the following would make it possible for a country to consume beyond its individual production possibilities curve?
(A) decreasing the unemployment rate
(B) producing only products for which they have an absolute advantage
(C) importing products from other countries that have a relatively lower opportunity cost
(D) imposing a tariff on all imports
(E) producing more consumer goods rather than capital goods
- 3 Assume that pizza and stromboli are substitutes. Which of the following best describes the effect on the pizza market if the price of stromboli decreases?
(A) Demand for pizza will shift right
(B) Demand for pizza will shift left
(C) Supply for pizza will shift right
(D) Supply for pizza will shift left
(E) Both demand and supply for pizza will shift left
- 4 An effective price ceiling in the market for tea will most likely result in a/an
(A) decrease in demand for sugar, a complement for tea
(B) increase in demand for coffee, a substitute for tea
(C) surplus of tea
(D) shortage of tea
(E) leftward shift in the supply curve of good X
- 5 On a downward sloping, straight line demand curve, which of the following is always true?
(A) Price elasticity of demand is the same at all points along the curve
(B) Price elasticity increases as quantity increases
(C) Price elasticity decreases as quantity increases
(D) Demand is perfectly elastic at the midpoint of the demand curve
(E) Total revenue is higher when demand is elastic than when demand is inelastic
- 5 Skip this question. If your teacher gave this exam to you but he/she didn't purchase Jacob Clifford's Ultimate Review Packet then you
(A) should cheat since your teacher is a cheater
(B) must teach him/her about the free rider problem
(C) yell "my econ teacher doesn't understand econ!"
(D) must remind your teacher to do the right thing
(E) should do all of the above

- 6 If consuming one unit of a good yields 50 utils and consuming two units of the good yields 70 utils, which of the following must be true?
- (A) The marginal utility of the first unit is 20.
 - (B) The marginal utility of the second unit is 50.
 - (C) The marginal utility of the second unit is 20.
 - (D) The total utility of consuming two units is 120.
 - (E) The total utility of consuming one unit is greater than the total utility of consuming two units.
- 7 In the short run, diminishing marginal returns begin when
- (A) total product of labor begins to fall.
 - (B) marginal product of labor becomes negative.
 - (C) marginal revenue begins to fall.
 - (D) the average product of labor begins to fall.
 - (E) marginal product of labor begins to fall.
- 9 Economic profit can be calculated as accounting profit plus
- (A) Implicit costs
 - (B) Explicit costs
 - (C) Total costs
 - (D) Fixed costs
 - (E) Variable costs
- 10 If a perfectly competitive firm produces at an output level where price is greater than both marginal cost and average variable cost, in order to maximize profit in the short run, the firm should
- (A) shut down production
 - (B) produce more
 - (C) produce less
 - (D) lower price
 - (E) change nothing, they are already maximizing economic profit
- 11 Governments often allow some natural monopolies to exist without competition because
- (A) unregulated natural monopolies are allocatively efficient.
 - (B) unregulated natural monopolies are productively efficient.
 - (C) natural monopolies cannot earn economic profit unless subsidized by the government.
 - (D) natural monopolies experience economies of scale at the allocatively efficient output.
 - (E) natural monopolies operate under the protection of patents issued by the government.



- 8 According to the graph above, what price will this perfectly competitive firm charge in the long run?
- (A) P1
 - (B) P2
 - (C) P3
 - (D) P4
 - (E) P5

- 12 Monopolistically competitive firms are usually less efficient than perfectly competitive firms because monopolistically competitive firms
- (A) have a lower price than competitive industries.
 - (B) have a higher quantity than competitive industries.
 - (C) produce unique products with no close substitutes.
 - (D) produce where marginal costs does not equal marginal revenue.
 - (E) produce where price is greater than marginal cost.
- 13 A perfectly competitive firm hires three workers in a perfectly competitive labor market. The daily marginal products of the three workers are listed below.

Number of Workers	Marginal Product
1	200
2	150
3	50

Which of the following is most likely true?

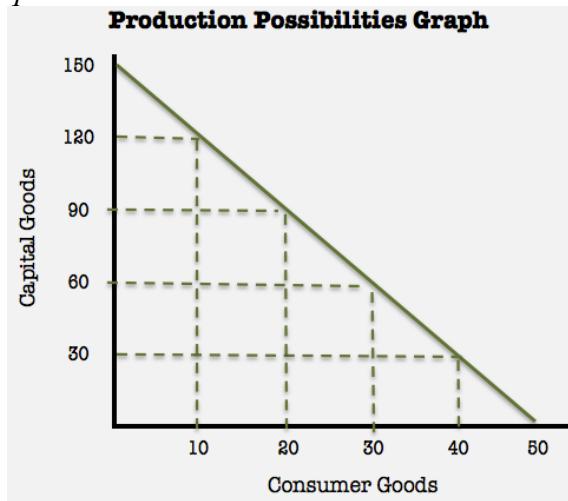
- (A) Worker 3 will receive the lowest wage
- (B) All workers will receive a wage based on their individual marginal revenue product
- (C) Each worker will receive the same wage, equal to the marginal revenue product of the last worker
- (D) Each worker will receive the same wage, equal to the marginal revenue product of the first worker
- (E) Each worker will receive the same wage, based on the average product of all workers hired

- 14 Assume the government establishes a new binding minimum wage. For a typical firm, which of the following will happen the marginal resource cost (MRC) and the marginal revenue product (MRP) of the last worker hired.

MRC	MRP
(A) Increase	Increase
(B) Increase	Decrease
(C) No Change	Increase
(D) Decrease	Increase
(E) Decrease	Decrease

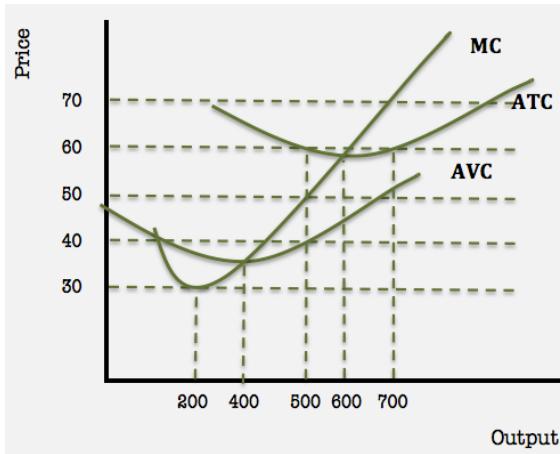
- 15 When consumption of a good generates a positive externality and government takes action to fix the problem created by this externality, what problem is the government most likely attempting to fix?
- (A) The product is overproduced, given the social costs and benefits
 - (B) The subsidy for production of this good is too high
 - (C) Society wants government to eliminate the spillover costs
 - (D) Consumption of this good widens the income inequality gap
 - (E) The product is underproduced, given the social costs and benefits

Use the following graph to answer questions 16 & 17

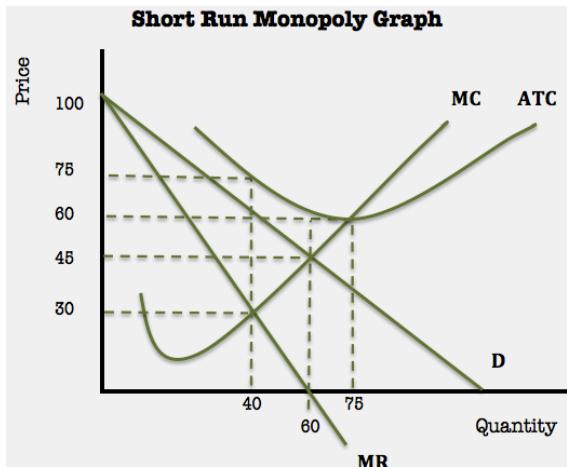


- 16 The graph above illustrates the production possibilities for Country X. Assume Country X is currently producing 30 capital goods and 40 consumer goods. Which of the following combinations could Country X produce that would most likely accelerate economic growth?
- (A) 0 capital goods; 50 consumer goods
 - (B) 90 capital goods; 20 consumer goods
 - (C) 150 capital goods; 50 consumer goods
 - (D) 60 capital goods; 20 consumer goods
 - (E) None of the above combinations would promote economic growth, as their current combination already maximizes growth
- 17 Using the same graph above, assuming Country X is producing efficiently, calculate their opportunity cost to increase production of consumer goods from 20 units to 30 units.
- (A) 3 capital goods
 - (B) 10 capital goods
 - (C) 30 capital goods
 - (D) 10 consumer goods
 - (E) None, when producing efficiently, there is no opportunity cost
- 18 In the competitive market for jelly beans (a normal good), all of the following are true EXCEPT
- (A) A decrease in consumer income would shift demand left
 - (B) An increase in variable costs of producing jelly beans would shift supply left
 - (C) A decrease in the price of a substitute good would shift demand left
 - (D) An increase in population would shift demand right
 - (E) A decrease in the price of jelly beans would shift demand right
- 19 The quantity of acrylic paint supplied decreased from 500 tons per week to 400 tons per week when the price of acrylic paint decreased from \$20 per ton to \$10 per ton. The price elasticity of supply for acrylic paint over this price range is
- (A) perfectly elastic
 - (B) perfectly inelastic
 - (C) relatively inelastic
 - (D) relatively elastic
 - (E) unit elastic
- 20 The difference between the price at which a producer would be willing to sell a candy bar and the actual market price that she receives from the sale is best known as
- (A) marginal utility
 - (B) marginal cost
 - (C) ability to pay
 - (D) consumer surplus
 - (E) producer surplus

- 21 Johnny is currently spending his entire weekly snack budget on 5 bags of candy and 4 juice boxes. At his current level of consumption, Johnny's marginal utility for candy is 5 utils and his marginal utility for juice boxes is 10 utils. In order to maximize his total utility, Johnny should
- maintain his current level of consumption of candy and juice boxes regardless of the prices
 - consume more candy and fewer juice boxes regardless of the prices
 - consume more juice boxes and fewer candy regardless of the prices
 - maintain his current level of consumption if the price of candy is \$2 and the price of a juice box is \$1
 - maintain his current level of consumption if the price of candy is \$1 and the price of a juice box is \$2
- 23 A firm experiencing diseconomies of scale will have
- a long-run supply curve that is horizontal.
 - a long-run marginal cost curve that decreases as output increases.
 - a long-run total cost that decreases as output increases.
 - a long-run average total cost that increases as output increases.
 - a long-run average total cost that decreases as output increases.
- 24 Which of the following best describes a perfectly competitive market?
- a market structure with a large number of interdependent large firms selling identical products
 - a market structure with dozens of small firms offering a differentiated product with easy entry into the market
 - a market that is productively efficient, but not allocatively efficient
 - a market that has high barriers to entry
 - a market structure where individual firms have no control over the price that they charge

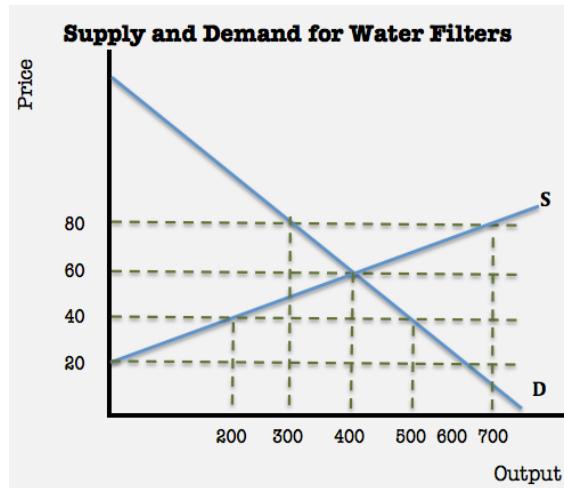


- 22 Using the graph above, if this perfectly competitive firm maintains marginal revenue of \$50 per unit, which of the following accurately describes the firm's profit/loss and output in the short run?
- Profit; output of less than 550
 - Profit; output of more than 550
 - Loss; output of less than 550
 - Loss; output of more than 550
 - Break even; output of more than 550



- 25 The graph above illustrates the costs and revenues for an unregulated monopoly producing in the short run. What price and quantity combination will this firm choose to profit maximize or loss minimize?
- (A) $P = 75; Q = 40$
 - (B) $P = 60; Q = 40$
 - (C) $P = 45; Q = 60$
 - (D) $P = 60; Q = 75$
 - (E) $P = 30; Q = 40$
- 26 Which of the following best describes the marginal revenue curve as a single-price monopolist increases its output in the short run?
- (A) decreasing at first, then increasing
 - (B) increasing at first, then decreasing
 - (C) horizontal and equal to the market price
 - (D) decreasing and equal to the monopolist's demand curve
 - (E) decreasing and below the monopolist's demand curve
- 27 Which of the following is not true of a monopolistically competitive firm in long-run equilibrium?
- (A) Price equals average total cost and marginal cost
 - (B) Price equals average total cost but is greater than marginal cost.
 - (C) Marginal cost equals marginal revenue
 - (D) The firm uses product differentiation.
 - (E) The firm earns a normal profit
- 28 In a perfectly competitive labor market, imposing a binding minimum wage will bring about what change(s) on the demand and supply graph?
- (A) increase in wage, decrease in quantity of workers hired
 - (B) increase in wage, increase in quantity of workers hired
 - (C) decrease in wage, decrease in quantity of workers hired
 - (D) decrease in wage, increase in quantity of workers hired
 - (E) none of the above, imposing a binding minimum wage will have no effect on wage or the quantity of workers hired
- 29 A firm hires two inputs, labor and capital, in perfectly competitive resource markets. The firm sells its product in a perfectly competitive market for \$10 per unit. The marginal cost to hire each unit of capital is \$150 per day, and the marginal product of labor is 10. Assuming the firm hires the least-cost combination of labor and capital, the firm's marginal product of capital and the daily wage per worker must be equal to which of the following?
- (A) Marginal product of capital must be 10 and the daily wage for labor must be \$50.
 - (B) Marginal product of capital must be 10 and the daily wage for labor must be \$100.
 - (C) Marginal product of capital must be 15 and the daily wage for labor must be \$50.
 - (D) Marginal product of capital must be 15 and the daily wage for labor must be \$75.
 - (E) Marginal product of capital must be 15 and the daily wage for labor must be \$100.

- 30 Which of the following is the best example of a pure public good?
- A public fishing pond that only charges a fee to out-of-state residents
 - A fire station that provides protection to the surrounding community
 - Satellite television service that charges \$49 per month
 - An old town firehouse that has been converted into a successful restaurant
 - Music downloads that cost \$0.99 cents each
- 31 Which of the following is a fundamental aspect of the free market economics system?
- Most economic decisions are based upon the ideas of both Adam Smith and Karl Marx.
 - Public control of the means of production.
 - The protection of private property rights.
 - Economic decisions made to preserve traditions and the status quo.
 - Central planners set the price of resources, but the price of products are set by unregulated markets.
- 32 In 2014, 13 billion bushels of corn were harvested and sold for \$3.70 per bushel. The next year, 13 billion bushels of corn were harvested and sold at \$3.50 per bushel. Which of the following changes in supply and demand could have caused this change?
- Supply decreased while demand decreased
 - Supply increased while demand decreased
 - Supply decreased while demand increased
 - Supply increased while demand increased
 - Supply increased while demand did not change
- 33 An early frost destroys 20% of the coffee bean crop. If the supply and demand for coffee beans are both relatively inelastic, and the frost does not impact the quality of the coffee beans that make it to market, which of the following will most likely occur to the equilibrium price and quantity of coffee beans?
- Price and quantity will both increase
 - Price and quantity will both decrease
 - Price will increase, quantity will decrease
 - Price will decrease, quantity will increase
 - Price will not change, quantity will decrease



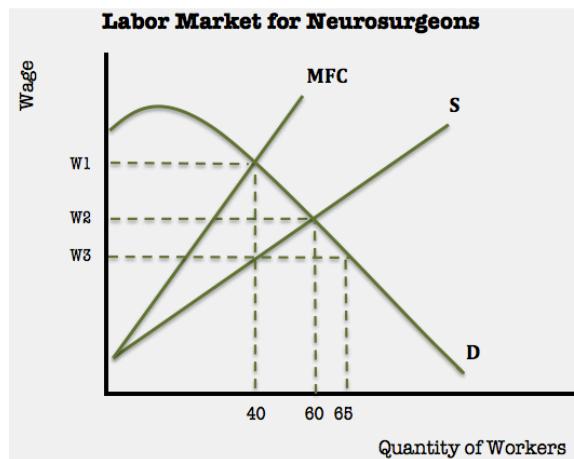
- 34 The graph above shows the supply and demand for water filters. If the government imposes a price floor at \$40 per unit, the result will be
- a surplus of 300 units
 - a shortage of 300 units
 - a surplus of 400 units
 - a shortage of 400 units
 - None of the above

- 35 Which of the following is true if the government enacts a per-unit tax on a product with relatively inelastic demand and relatively elastic supply?
- (A) The price that consumers pay will decrease.
(B) The demand for the product will decrease.
(C) The tax burden will fall equally on both consumers and producers.
(D) The tax burden will fall more on consumers than on producers.
(E) The consumer surplus will increase.
- 36 Herman spends his entire income on only two goods: bagels and juice. Currently, his MU for bagels is 12, and his MU for juice is 6. If the price for each bagel is \$3, and the price for each juice is \$1, this Herman should
- (A) buy more bagels and more juice
(B) buy less bagels and less juice
(C) buy more bagels and less juice
(D) buy less bagels and more juice
(E) none of the above, Herman is already maximizing his utility
- 37 If none of a firm's costs are fixed, which of the following must be true as its output increases?
- (A) Average total cost is increasing
(B) Marginal cost equals Average total cost
(C) The firm is experiencing constant returns to scale
(D) Average total cost equals average variable cost
(E) Marginal product of labor is decreasing
- 38 Which of the following accurately differentiates allocative efficiency and productive efficiency on a firm graph?
- (A) Allocative efficiency is where $P = \text{minimum average total cost}$; Productive efficiency is where $P = MC$
(B) Allocative efficiency is where $MC = MR$; Productive efficiency is where $P = \text{minimum average total cost}$
(C) Allocative efficiency is where $P = MC$; Productive efficiency is where $P = \text{minimum average total cost}$
(D) Allocative efficiency is where $MR = 0$; Productive efficiency is where $MC = MR$
(E) Allocative efficiency is where $P = MC$; Productive efficiency is where economic losses are minimized
- 39 Assume peanut farmers hire their workers in a perfectly competitive labor market and sell their product in a perfectly competitive product market. A decrease in the demand for peanuts will result in which of the following changes in the labor market?
- (A) neither supply nor demand will shift, as labor and products are unrelated in this case.
(B) The supply curve for labor will shift to the right.
(C) The demand curve for labor will shift to the right.
(D) The supply curve for labor will shift to the left.
(E) The demand curve for labor will shift to the left.
- 40 A firm must be able to separate consumers into different groups based on their elasticity of demand in order to
- (A) product differentiate
(B) profit maximize
(C) price discriminate
(D) experience economies of scale
(E) maximize consumer surplus

- 41 Oligopolistic firms all share this characteristic, which is not typically found in any other market structure.
- They spend more than half their revenue on highly competitive advertising
 - They differentiate their products
 - They price discriminate
 - They produce identical products
 - They are mutually interdependent
- 42 All of the following are true statements about market structures EXCEPT
- The demand curve for a perfectly competitive firm is perfectly elastic
 - Monopolistically competitive firms earn a normal profit in the long run
 - Oligopolistic firms are more interdependent than monopolistically competitive firms
 - Competitive firms are more likely to experience economies of scale than oligopolistic firms
 - Perfectly competitive firms are always productively efficient in the long run

Quantity of Labor	Quantity of Output
0	0
1	20
2	50
3	70
4	80
5	85
6	88

- 43 Assume this firm hires all workers for a wage of \$50 per day, and can sell as many units as it produces at the market price of \$10 per unit. Calculate the profit-maximizing quantity of labor and the Marginal Revenue Product (MRP) for the last worker hired.
- 4 workers; \$100
 - 4 workers; \$10
 - 5 workers; \$100
 - 5 workers; \$50
 - 5 workers; \$10



- 44 Assume that a Regional Hospital Network is the only firm hiring neurosurgeons. Using the graph provided, identify the wage and quantity of neurosurgeons hired by this profit maximizing firm.
- W1; 40
 - W2; 60
 - W3; 65
 - W2; 40
 - W3; 40

- 45 Assume that all individuals benefit from flu shots, regardless of whether they purchase a flu shot themselves. Which of the following best explains why the number of people who choose to get a flu shot is not the same as the socially optimal quantity of vaccinations.
- (A) Vaccinations generate negative externalities.
 - (B) Vaccinations are non-excludable.
 - (C) Vaccinations result in diseconomies of scale.
 - (D) The marginal cost of a vaccination is zero.
 - (E) Vaccinations generate positive externalities.
- 46 All of the following are true about an country's production possibilities curve EXCEPT
- (A) If it is bowed out (concave to the origin), it is experiencing increasing opportunity costs of production
 - (B) An increase in unemployment causes the curve to shift inward towards the origin.
 - (C) It shows the alternative combinations of goods that can be produced given a country's scarce resources
 - (D) If it is a straight line, the country is experiencing constant opportunity costs of production
 - (E) Producing a quantity on the production possibilities curve is always productively efficient
- 47 Sports cars are a normal good. Which of the following contribute to the downward sloping demand for sports cars?
- I. Law of diminishing marginal utility
 - II. Substitution effect
 - III. Income effect
 - IV. Allocative efficiency
- (A) I and II only
 - (B) II and III only
 - (C) I and III only
 - (D) I, II and III only
 - (E) I, II, III and IV
- 48 Historically, coal miners had a very high risk of developing various lung diseases, due in part to lack of ventilation. Engineering advancements allowed better ventilation in mines, eliminating some of this risk. Which is the most likely impact of these engineering advancements upon the supply and demand for labor in the mining industry?
- (A) Demand curve will shift left, supply curve will shift right
 - (B) Demand curve will shift left, supply curve will shift left
 - (C) Demand curve will shift right, supply curve will shift right
 - (D) Demand curve will not shift, supply curve will shift left
 - (E) Demand curve will not shift, supply curve will shift right
- 49 If the demand for health care is very inelastic, an increase in the price of health care will
- (A) increase the total revenue of health care providers
 - (B) decrease the total revenue of health care providers
 - (C) decrease the total consumer expenditures on health care
 - (D) cause the demand for health care to increase
 - (E) have no effect on the total revenue of health care providers
- 50 If only one supplier in a perfectly competitive market received a per-unit subsidy this year, how will this subsidy impact the firm's price and output in the short run?
- (A) price will increase; output will increase
 - (B) price will not change; output will increase
 - (C) price will decrease; output will increase
 - (D) price will not change; output will decrease
 - (E) price will decrease; output will decrease

- 51 Why does the marginal cost of producing cookies eventually increases in the short run?
- economies of scale
 - diseconomies of scale
 - increasing fixed costs
 - diminishing marginal product
 - increasing marginal product
- 52 Which of the following is always true about the relationship between a firm's ATC and MC curves in the short run?
- the ATC curve intersects the MC curve at the minimum point of the MC curve
 - the MC curve intersects the ATC curve at the minimum point of the ATC curve
 - the MC curve intersects the ATC curve at the maximum point of the ATC curve
 - ATC and MC are always equal
 - ATC and MC are never equal
- 53 Assuming all of a firm's cost are explicit, the output level where accounting profit is maximized will always be where
- Total revenue equals total implicit costs
 - price equals average total cost
 - price equals marginal cost
 - the difference between marginal revenue and marginal cost is maximized
 - marginal cost equals marginal revenue
- 54 Which of the following is least likely to increase economic profit in any given market?
- Effective price discrimination
 - A few firms consolidating market shares
 - A government subsidy
 - An effective price floor
 - Low barriers to entry
- 55 Which of the following will most likely occur if a perfectly competitive market is replaced by a single-price monopolist?
- The deadweight loss will increase
 - Profit-maximizing output will increase
 - Price will decrease
 - Economic profit will decrease
 - The firm's total revenue will increase

		SpeedCo	
		High	Low
Fast Track	High	(70, 60)	(20, 100)
	Low	(100, 20)	(30, 30)

- 56 SpeedCo and Fast Track are the only two companies providing local 24-hour delivery service. If these firms do not collude and both follow their dominant strategy, according to the payoff matrix above, how much profit will each company earn?
- Fast Track: 70, SpeedCo: 60
 - Fast Track: 100, SpeedCo: 20
 - Fast Track: 20, SpeedCo: 100
 - Fast Track: 30, SpeedCo: 30
 - Fast Track: 60, SpeedCo: 70
- 57 A monopolistically competitive firm is currently in long-run equilibrium. If the output of the firm is 50 units and the price the firm receives for each product is \$10, what is the total cost for this firm?
- \$5
 - \$10
 - \$50
 - \$500
 - There is not enough information given to determine average total cost.

- 58 Floor-Mart is one of many firms hiring workers in a perfectly competitive labor market. If Floor-Mart's demand for labor increases, how will this impact the number of workers hired by Floor-Mart and the equilibrium wage in this labor market.
- (A) The firm will hire fewer workers and the equilibrium wage will increase.
(B) The firm will hire the same number of workers and the equilibrium wage will increase.
(C) The firm will hire the same number of workers and the equilibrium wage will decrease.
(D) The firm will hire more workers and the equilibrium wage will increase.
(E) The firm will hire more workers and the equilibrium wage will remain the same.
- 59 Assume the marginal social cost of the last unit of Iocane Powder provided is greater than the marginal social benefit. Which of the following can be used to achieve a more efficient outcome in the market for Iocane Powder?
- (A) A per-unit subsidy for Iocane Powder
(B) A lump-sum subsidy for Iocane Powder
(C) A per-unit tax for Iocane Powder
(D) A lump-sum tax for Iocane Powder
(E) Perfect price discrimination
- 60 How would making a country's income tax more progressive affect the income inequality of its citizens?
- (A) It would increase income inequality
(B) It would decrease income inequality
(C) It would not affect income inequality
(D) It would increase the wage difference between men and women
(E) It would not affect the wage difference between men and women

MICROECONOMICS			
Practice Exam #1			
Q#	Ans.	Unit	Topic
1	B	1	Human Capital
2	C	1	Comparative Advantage
3	B	2	Substitutes
4	D	2	Price Controls
5	C	2	Elasticity of Demand
6	C	2	Marginal Utility
7	E	3	Diminishing Returns
8	B	3	Perfect Competition
9	A	3	Economic Profit
10	B	3	Maximizing Profit
11	D	4	Natural Monopolies
12	E	4	Efficiency
13	C	5	Labor Market
14	A	5	Resource Market
15	E	6	Externalities
16	B	1	Capital and Growth
17	C	1	Opportunity Cost
18	E	2	Supply and Demand
19	C	2	Elasticity of Supply
20	E	2	Welfare Economics
21	E	2	Maximizing Utility
22	C	3	Perfect Competition
23	D	4	Long Run Costs
24	E	5	Perfect Competition
25	B	4	Maximizing Profit
26	E	4	Monopoly Demand
27	A	4	Monopolistic Competition
28	A	5	Minimum Wage
29	E	5	Least-Cost Combination
30	B	6	Public/Private Goods

Q#	Ans.	Unit	Topic
31	C	1	Economic Systems
32	B	2	Double Shifts
33	C	2	Supply and Demand
34	E	2	Price Controls
35	D	2	Taxes and Elasticity
36	D	2	Maximizing Utility
37	D	3	Costs of Production
38	C	3	Efficiency
39	E	5	Derived Demand
40	C	4	Monopolistic Behavior
41	E	4	Oligopolies
42	D	4	Market Structures
43	D	5	Marginal Revenue Product
44	E	5	Monopsony
45	E	6	Externalities
46	B	1	Production Possibilities
47	D	3	Demand
48	E	5	Competitive Labor Market
49	A	2	Elasticity of Demand
50	B	3	Subsidies
51	D	3	Costs of Production
52	B	3	Costs of Production
53	E	3	Maximizing Profit
54	E	4	Market Structures
55	A	4	Monopolistic Behavior
56	D	4	Game Theory
57	D	4	Monopolistic Competition
58	E	5	Competitive Labor Market
59	C	6	Externalities
60	B	6	Income Inequality

Thank you for buying the Ultimate Review Packet and supporting ACDC Econ.

To watch a video of me going over each of these questions please go to:

<http://www.acdcecon.com/exams>

- Jacob Clifford

Microeconomics
Practice Exam #2

- 1 On Friday evenings, Spencer usually works a 5-hour shift at the Burger Shack, earning \$8 per hour. Spencer's friend asks him if he would like to go to the baseball game this Friday night. If Spencer chooses not to work this Friday and instead purchases a ticket to the game for \$30, what is Spencer's opportunity cost of this decision?
- (A) \$8
 (B) \$30
 (C) \$38
 (D) \$40
 (E) \$70

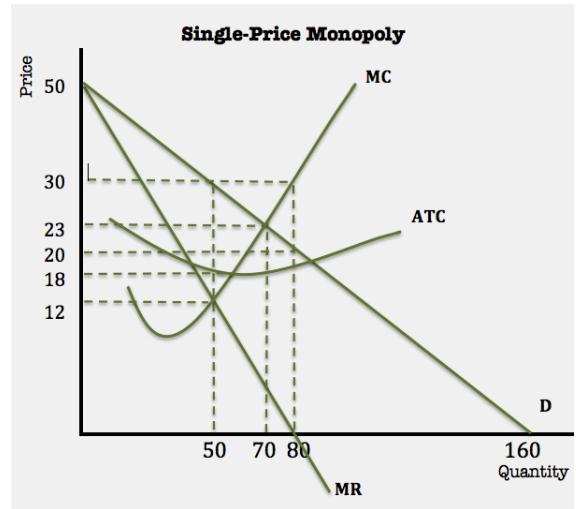
	Mow Lawns	Pull Weeds
Noah	60 minutes	30 minutes
Sydney	90 minutes	60 minutes

- 2 The table above provides the number of minutes it takes for Noah and Sydney to mow lawns and to pull weeds. Assuming they choose their jobs based on the principle of comparative advantage, which of the following should occur?
- (A) Noah should mow lawns while Sydney pulls weeds.
 (B) Sydney should mow lawns while Noah pulls weeds.
 (C) Both Noah and Sydney should pull weeds, and they should hire an additional worker to mow lawns.
 (D) Noah should split his time equally between both jobs.
 (E) Sydney should split his time equally between both jobs.

- 3 Assume tomatoes are an input used in traditional sauce. If the price of tomatoes decreases, and at the same time, there is an increase in the price of alfredo sauce — a substitute for traditional sauce, which of the following will definitely result from the combination of these factors?
- (A) The equilibrium quantity of traditional sauce will increase.
 (B) The equilibrium quantity of traditional sauce will decrease.
 (C) The equilibrium quantity of traditional sauce will be unaffected.
 (D) The equilibrium price of traditional sauce will increase.
 (E) The equilibrium price of traditional sauce will decrease.
- 4 A local coffee shop increases the price of a coffee from \$3.25 to \$3.50. If the demand for coffee is relatively price inelastic, how will this change most likely affect the amount of coffee purchased and the coffee shop's total revenue?
- (A) The amount purchased remains the same; revenue increases
 (B) The amount purchased increases; revenue increases
 (C) The amount purchased decreases; revenue decreases
 (D) The amount purchased decreases; revenue increases
 (E) The amount purchased decreases; revenue remain the same
- 5 The cross-price elasticity of demand for Good X and Good Y is equal to +1.0. What does this indicate about the relationship between Good X and Good Y?
- (A) Good X and Good Y are unit elastic
 (B) Good X and Good Y are complements
 (C) Good X and Good Y are substitutes
 (D) Good X and Good Y are both normal goods
 (E) Good X and Good Y are both inferior goods

- 6 The law of diminishing marginal utility is most commonly used to help explain the
 (A) law of demand
 (B) law of supply
 (C) shape of the production possibilities curve
 (D) law of increasing opportunity costs
 (E) horizontal demand curve for a perfectly competitive firm
- 7 If the government levies a lump-sum tax on cell phone manufacturers, which of the following will occur in the short run?
 (A) Marginal cost will increase.
 (B) Quantity of cell phones produced will increase.
 (C) Quantity of cell phones produced will decrease.
 (D) Average total cost will increase.
 (E) Average variable cost will increase.
- 8 Which of the following is always true for production in the short run, but never true in the long run?
 (A) Average total costs are increasing
 (B) Marginal costs are constant.
 (C) Decisions made only affect production for less than one year
 (D) None of the factors of production are variable
 (E) At least one factor of production is fixed.
- 9 Which of the following is true for a profit maximizing firm in any type of market structure?
 (A) total revenue equals total cost
 (B) Price is greater than marginal cost
 (C) Price is equal to marginal cost
 (D) total revenue is greater than marginal revenue
 (E) marginal revenue equals marginal cost
- 10 Compared to a monopoly with identical demand and cost curves, a perfectly competitive firm will
 (A) charge a lower price and produce a higher output
 (B) charge the same price and produce a higher output
 (C) charge a lower price and produce the same output
 (D) charge a higher price and produce a lower output
 (E) charge a higher price and produce the same output

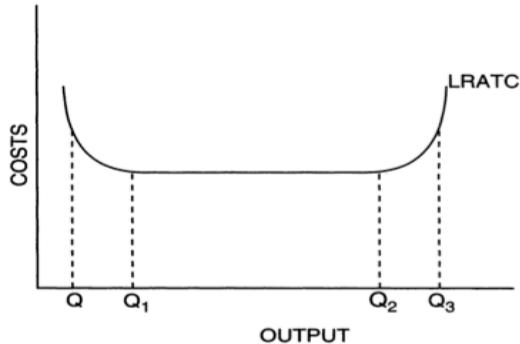
Use the following graph to answer questions 11 & 12



- 11 Above is a graph illustrating the costs and revenues for an unregulated, single-price monopoly. Assuming this monopoly is profit-maximizing, calculate the area of total consumer surplus
 (A) \$25
 (B) \$180
 (C) \$300
 (D) \$500
 (E) \$1,500

- 12 At what price (P) and quantity (Q) combination would this monopolist maximize total revenue?
- (A) P = \$30; Q = 50
(B) P = \$23; Q = 70
(C) P = \$20; Q = 80
(D) P = \$0; Q = 160
(E) P = \$0; Q = 0
- 13 Which of the following best describes the supply and demand curves for a firm hiring labor in a perfectly competitive labor market?
- (A) Firm's demand curve for labor is horizontal, firm's supply curve for labor is upward sloping
(B) Firm's demand curve for labor is horizontal, firm's supply curve for labor is horizontal
(C) Firm's demand curve for labor is horizontal, firm's supply curve for labor is downward sloping
(D) Firm's demand curve for labor is downward sloping, firm's supply curve for labor is upward sloping
(E) Firm's demand curve for labor is downward sloping, firm's supply curve for labor is horizontal
- 14 A firm produces tennis shoes, hiring labor from a perfectly competitive labor market. This firm will profit maximize if it continues to hire workers until the marginal factor cost of labor is equal to the
- (A) marginal factor cost of capital
(B) marginal revenue product of labor
(C) market demand for labor
(D) price of the good that labor is producing
(E) wage paid to each worker
- 15 Assuming national defense is a pure public good, which of the following is the best explanation for why it is impossible for the private sector to provide a sufficient quantity of national defense?
- (A) the marginal social benefit of national defense would equal the marginal social cost
(B) national defense imposes a negative externality upon the public
(C) the private sector could not pay for all the costs of national defense
(D) the private sector cannot be trusted with providing national defense
(E) the private sector could not exclude non-payers from enjoying the benefits of national defense
- 16 A country will most likely cause an outward shift in its production possibilities by
- (A) Increasing the price of product(s) for which it has a comparative advantage
(B) Investing in the development of new technology
(C) Producing more of its most expensive products
(D) Reducing foreign trade and increasing taxes on businesses
(E) Reducing its spending for developing human capital
- 17 The law of increasing opportunity costs directly explains the shape of which of the following curves?
- (A) The average fixed cost curve
(B) The market demand curve
(C) A concave production possibility curve
(D) A straight-line production possibilities curve
(E) The marginal revenue curve

- 18 If the price of baseball caps increases, which of the following will most likely occur in the market for baseball caps?
- (A) The demand for baseball caps will decrease
(B) The supply of baseball caps will increase
(C) The quantity supplied for baseball caps will increase
(D) The demand will decrease and the supply will increase
(E) The equilibrium quantity for baseball caps will be unaffected
- 19 As the price of cinnamon increases by 10 percent, and as a result, the quantity demanded for spice X decreases by 5 percent. Based on this information, calculate the value of the cross price elasticity of demand coefficient and determine whether cinnamon and spice X are complements or substitutes.
- (A) 2.0; substitutes
(B) -2.0; complements
(C) 0.5; substitutes
(D) -0.5; complements
(E) -0.5; substitutes
- 20 Allocative efficiency always occurs when a firm produces a quantity where
- (A) price equals marginal cost
(B) price exceeds average total cost
(C) marginal revenue equals marginal cost
(D) average revenue equals average total cost
(E) average total cost is at its minimum
- 21 When the price of both pizza and tacos is zero, Mr. Box chooses to eat a taco. If Mr. Box has to pay, he chooses to eat pizza. Assuming Mr. Box is a rational consumer, which of the following must be true when Mr. Box has to pay?
- (A) the price of pizza is greater than the price of a taco
(B) the price of a taco is greater than the price of pizza
(C) the marginal utility of pizza equals the marginal utility of a taco
(D) the marginal utility per dollar of a taco is greater than the marginal utility per dollar of pizza
(E) the marginal utility of a taco equals zero
- 22 At 10 units of output, a firm's total fixed cost is \$60,000. If the firm's total cost is \$100,000, its average variable cost is equal to
- (A) \$160,000
(B) \$40,000
(C) \$6,000
(D) \$4,000
(E) \$0
- 23 Assume that soybeans are produced in a constant cost perfectly competitive market that is currently in long-run equilibrium. An increase in the number of consumers shifts demand for soybeans, but has no effect on supply. Which of the following best describes the effect of price in the short run and in the long run?
- (A) Price will increase in the short run; Price will increase in the long run.
(B) Price will increase in the short run; Price will remain constant in the long run.
(C) Price will decrease in the short run; Price will increase in the long run.
(D) Price will decrease in the short run; Price will decrease in the long run.
(E) Price will decrease in the short run; Price will remain constant in the long run.



- 24 According to this long-run average total cost curve, if this firm produces any quantity less than Q_1 , the firm will experience
 (A) Diseconomies of scale
 (B) Economies of scale
 (C) Constant returns to scale
 (D) Increasing opportunity costs
 (E) Productive efficiency
- 25 The profit-maximizing quantity for a monopolist that is unregulated will always be
 (A) where marginal cost and the demand curve cross
 (B) where price equals marginal cost
 (C) where marginal revenue equals price
 (D) where marginal revenue equals zero
 (E) in the elastic region of the demand curve
- 26 A firm producing in monopolistic competition is not productively efficient in the long run because
 (A) there are no barriers to entry
 (B) firms are mutually interdependent
 (C) the price is set above minimum ATC
 (D) long-run profits are usually positive
 (E) they experience diseconomies of scale
- 27 For both a perfectly competitive firm and a monopolistically competitive firm, all of the following statements are true in the long run, EXCEPT
 (A) Total revenue = Total costs
 (B) Price = Average total cost
 (C) Marginal costs = Marginal revenue
 (D) Price = Average revenue
 (E) Price = Marginal costs
- 28 Assume the marginal product of capital is 50, and the marginal product of labor is 150. If the price to hire each unit of capital is \$50 per day, while the price to hire each unit of labor is \$100 per day, which of the following is true for a firm hiring all inputs from perfectly competitive markets?
 (A) The firm should maintain the units of capital and labor it has hired, it is already producing at its least-cost combination of labor and capital.
 (B) The firm is currently maximizing profits.
 (C) The firm should hire more labor and less capital in order to decrease costs.
 (D) The firm should hire more capital and less labor in order to decrease costs.
 (E) None of the above
- 29 Assume that PCI is a firm that hires 100 workers in a perfectly competitive labor market to produce paper clips in its factory. The government raises minimum wage above PCI's current wage. How will this impact PCI's marginal factor cost for labor employed and the marginal revenue product of the last worker hired?
 (A) Marginal factor cost will increase and the marginal revenue product will decrease.
 (B) Marginal factor cost will decrease and the marginal revenue product will decrease.
 (C) Marginal factor cost will decrease and the marginal revenue product will increase.
 (D) Marginal factor cost will increase and the marginal revenue product will increase.
 (E) Marginal factor cost will increase and the marginal revenue product will stay the same.

- 30 Free public radio is commonly described by economists as a public good because
- The total revenue is equal to the total costs of operation
 - It is both non-rival and non-excludable
 - The opportunity cost to access a broadcast from a free public radio station is lower than that of a privately-owned radio station
 - It provides benefits to millions of individuals
 - It is funded primarily through charitable donations

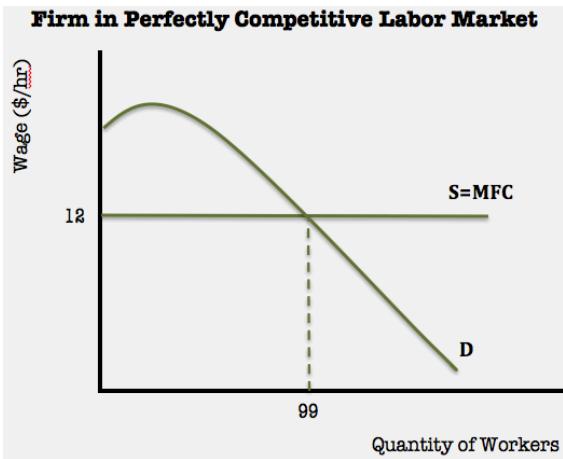
Iota-ville		Omega-land	
Coal	Steel	Coal	Steel
0	50	0	30
3	40	2	24
6	30	4	18
9	20	6	12
12	10	8	6
15	0	10	0

- 31 The table above shows the production combinations for two different countries. If Omega-land is currently producing 6 units of coal and 12 units of steel, what is their opportunity cost for producing 6 more units of steel?
- 6 units of steel
 - 6 units of coal
 - 4 units of coal
 - 2 units of coal
 - 1 unit of coal
- 32 Which of the following best describes the law of supply?
- When the supply for a good increases, the price will increase
 - When the supply for a good increases, the price will decrease
 - When the price of a good increases, its supply increases.
 - When the price of a good increases, its quantity supplied increases.
 - When the price of a good increases, its supply and demand will both decrease

- 33 All of the following would shift the supply curve for grapes in the short run EXCEPT
- an increase in the wages paid to grape harvesters
 - the elimination of per-unit subsidies provided for firm's producing grapes
 - an increase in government regulations concerning grape production
 - a strike by all vineyard workers
 - an increase in all household incomes
- 34 Assume the demand for NZT is perfectly inelastic and the supply for NZT is relatively elastic. Which of the following would result from a decrease in supply?
- Price will increase; Quantity will decrease
 - Price will decrease; Quantity will increase
 - Price will remain the same; Quantity will decrease
 - Price will increase; Quantity will remain the same
 - Price will decrease; Quantity will decrease
- 35 Of the following, which is the best example of consumer surplus?
- An individual who spends less than he or she earns in a given year
 - An individual who pays less for a pizza than he or she thinks it is worth
 - An individual who pays more for a pizza than he or she thinks it is worth
 - An individual who pays exactly what he or she thinks pizza is worth
 - When quantity supplied is greater than quantity demanded in a market
- 36 When marginal revenue is equal to zero, total revenue must be
- increasing
 - decreasing
 - at its minimum
 - at its maximum
 - equal to zero

- 37 Q TC
- | | |
|---|------|
| 0 | \$15 |
| 1 | \$35 |
| 2 | \$50 |
| 3 | \$60 |
| 4 | \$64 |
- The table above shows a firm's total cost (TC) of producing various units of output. What is the average variable cost of producing 3 units?
- (A) \$10
 (B) \$15
 (C) \$20
 (D) \$45
 (E) \$60
- 38 In a perfectly competitive product market, if both the quantity and price for a product decrease, which of the following most likely caused this change?
- (A) a decrease in demand
 (B) an increase in demand
 (C) a decrease in supply
 (D) an increase in supply
 (E) an increase in both demand and supply
- 39 If a firm's average total cost is above price at the loss-minimizing output, the firm should continue to produce in the short run as long as the
- (A) price is above the marginal cost.
 (B) price is above the average variable cost.
 (C) average total cost is above the marginal cost.
 (D) marginal cost is equal to the average variable cost.
 (E) firm is earning an accounting profit.
- 40 Assume that Denver Electric controls a monopoly over the supply of electricity in the surrounding area. Which of the following government actions would most likely decrease the deadweight loss due to the inefficiency of this monopoly?
- (A) Imposing a lump-sum tax on Denver Electric
 (B) Imposing a per-unit tax on Denver Electric
 (C) Granting a lump-sum subsidy on Denver Electric
 (D) Granting a per-unit subsidy to Denver Electric
 (E) Setting a binding price floor
- | | | Cube-Mart | |
|--------------------|---------------|------------------|---------------|
| | | <i>Ads</i> | <i>No Ads</i> |
| Frozen Inc. | <i>Ads</i> | (300, 400) | (250, 300) |
| | <i>No Ads</i> | (200, 300) | (500, 250) |
- 41 The payoff matrix above illustrates the daily profit earned by the only two ice cube manufacturers operating in a small town. The numbers to the left in each cell are for Frozen Inc. At Nash Equilibrium, how much combined daily profit will the two companies earn together?
- (A) \$250
 (B) \$500
 (C) \$550
 (D) \$700
 (E) \$750
- 41 Skip this question. This exam was created for students that support Jacob Clifford and purchase the Ultimate Review Packet. If someone gave this to you for free then they are:
- (A) Discouraging innovation and entrepreneurship
 (B) Stealing from Mr. Clifford
 (C) Breaking intellectual property right laws
 (D) Being a total jerk
 (E) All of the above

- 42 If a single-price monopolist suddenly finds a legal way to perfectly price discriminate, how will this impact this monopolist's consumer surplus and deadweight loss?
- (A) Consumer surplus will decrease slightly; deadweight loss will remain constant
- (B) Consumer surplus will remain constant; deadweight loss will decrease slightly
- (C) Consumer surplus will remain constant ; deadweight loss will be completely eliminated
- (D) Consumer surplus and deadweight loss will both remain constant
- (E) Consumer surplus and deadweight loss will be eliminated completely

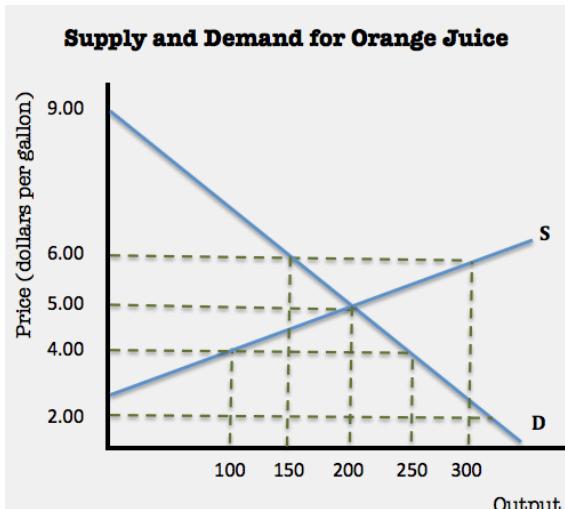


- 43 The graph above shows a firm hiring semi-skilled labor in a perfectly competitive labor market. If a new technology allows only the workers in this firm to double their marginal productivity, how will this effect the wage and optimal number of workers hired once this firm implements this new technology? ,
- (A) Wage increases and the number of workers hired increases
- (B) Wage increases and the quantity of workers decreases
- (C) Wage remains the same and the quantity of workers increases
- (D) Wage remains the same and the quantity of workers decreases
- (E) Both wage and quantity of workers hired remains the same

- 44 Assume the creation of a public park generates a positive externality for the surrounding community. Which of the following would be true of the costs and benefits of creating public parks in this community?
- (A) Marginal social cost is less than marginal social benefit.
- (B) Marginal social benefit is less than marginal social cost
- (C) The market equilibrium output is greater than the socially efficient output.
- (D) The market equilibrium output is equal to the socially efficient output.
- (E) The marginal social benefit of a park is greater than the marginal social benefit of a school.

- 45 The primary reason governments pass antitrust legislation is to
- (A) prevent large firms from merging or forming monopolies
- (B) protect small businesses from foreign competition
- (C) limit the number of firms in certain market structures
- (D) protect consumers from fraudulent business practices
- (E) allow the government to seize private property when necessary for the common good
- 46 Using the same amount of time and resources, Lydia can assemble either 8 block towers or 4 jigsaw puzzles; Anna can assemble either 4 block towers or 4 jigsaw puzzles. Based on this information, which of the following statements is correct?
- (A) Lydia has a comparative advantage in assembling jigsaw puzzles
- (B) Anna has a comparative advantage in assembling jigsaw puzzles
- (C) Anna has an absolute advantage in assembling jigsaw puzzles
- (D) Anna has an absolute advantage in assembling block towers
- (E) Lydia has a comparative advantage in assembling both block towers and jigsaw puzzles

- 47 Which of the following will cause the demand curve for grape jelly to shift to the left?
- (A) A decrease in the price of peanut butter assuming that peanut butter and jelly are complements
- (B) An increase in the price of marshmallow fluff assuming that grape jelly and marshmallow fluff are substitutes
- (C) A increase in the income of consumers, assuming that grape jelly is an inferior good
- (D) An increase in the wages of workers who work in the jelly factories
- (E) A decrease in the number of firms producing grape jelly
- 48 Assume marshmallows and graham crackers are complements. If the price of graham crackers decreases, which of the following will most likely occur in the short run in the marshmallow market?
- (A) Demand for marshmallows will decrease
- (B) Supply for marshmallows will decrease
- (C) Price and quantity for marshmallows will increase
- (D) Price and quantity for marshmallows will decrease
- (E) Quantity for marshmallows will increase, while price for marshmallows is indeterminate
- 49 The graph shows the supply and demand curves for gallons of orange juice. Which of the following will occur if the government establishes a price floor at \$6.00 per gallon?
- (A) a shortage and an increase in consumer surplus
- (B) a shortage and a decrease in consumer surplus
- (C) a surplus and an increase in consumer surplus
- (D) a surplus and a decrease in consumer surplus
- (E) neither a surplus or shortage will occur
- 50 Assume that restaurant meals are normal with an income elasticity of +1.5. If income decreases by 10%, the quantity of restaurant meals demanded should:
- (A) Increase by more than 10%
- (B) Increase by less than 10%
- (C) Decrease by more than 10%
- (D) Decrease by less than 10%
- (E) Decrease by exactly 10%
- 51 If a firm's marginal product of labor is decreasing, assuming that labor is the firm's only variable input, which of the following must be true in the short run?
- (A) Marginal cost is increasing
- (B) Marginal cost is decreasing
- (C) Average product of labor is decreasing
- (D) Marginal product of labor is decreasing
- (E) Total product of labor is decreasing
- 52 If a firm produces 40 units when it hires a total of 20 workers and 100 units when it hires a total of 40 workers the firm is experiencing
- (A) productive efficiency
- (B) diseconomies of scale
- (C) increasing returns to scale
- (D) decreasing returns to scale
- (E) constant returns to scale



- 53 A chocolate manufacturer earned 1 million dollars in total revenue, which was enough to cover all of its explicit costs. However, an economist concludes that the firm is not earning a normal profit or an economic profit. Which of the following must be true?
- (A) fixed costs are greater than accounting profits
(B) accounting profits are greater than explicit costs.
(C) explicit costs are less than implicit costs
(D) implicit costs are greater than accounting profits
(E) implicit costs are less than explicit costs
- 54 If a firm is producing where price and marginal cost are identical which of the following must be true?
- (A) total revenue is maximized
(B) economic profit is maximized
(C) The firm is producing the productively efficient output
(D) The firm is producing the allocatively efficient output
(E) The firm is perfectly competitive
- 55 Compared to perfectly competitive firms, monopolies achieve all of the following in the long run EXCEPT
- (A) Deadweight loss
(B) Allocative efficiency
(C) Higher prices
(D) Lower levels of output
(E) Long-run economic profit
- 56 Mutual interdependence and price leadership are often characteristics of which of the following market structures?
- (A) Monopoly
(B) Monopolistic competition
(C) Oligopoly
(D) Perfect competition
(E) Natural monopoly
- 57 A firm that hires its labor in a perfectly competitive labor market will hire workers up to the point where wage equals
- (A) marginal revenue
(B) marginal revenue product
(C) marginal physical product
(D) price of the good produced by the last worker
(E) marginal factor cost
- 58 In the short run, if marginal cost is greater than average total cost, which of the following must be true?
- (A) The average total cost is increasing
(B) The marginal cost equals marginal revenue
(C) The average fixed cost is increasing
(D) The marginal cost is less than average variable cost
(E) The marginal cost is decreasing
- 59 When consumption of a good generates a negative externality, which of the following is correct?
- (A) The government could eliminate deadweight loss by imposing a per-unit subsidy
(B) The government could eliminate deadweight loss by imposing a lump-sum tax.
(C) The government could eliminate deadweight loss by imposing a per-unit tax.
(D) If government does not intervene, Marginal social benefit is greater than marginal private benefit.
(E) If government does not intervene, marginal private cost is greater than marginal social cost.

- 60 The Lorenz curve is used by economists to measure which of the following?
- (A) The responsiveness of quantity demanded or supplied to a change in price
 - (B) the impact changes in unemployment and inflation have upon one another
 - (C) the change in tax revenue in response to a change in the tax rate
 - (D) how equally, or unequally, income is distributed among a population
 - (E) how equally, or unequally, wealth is distributed among a population

Microeconomics			
Practice Exam #2			
Q#	Ans.	Unit	Topic
1	E	1	Opportunity Cost
2	B	1	Comparative Advantage
3	A	2	Double Shifts
4	D	2	Elasticity/Total Revenue
5	C	2	Cross Price Elasticity
6	A	2	Law of Demand
7	D	3	Lump Sum Tax
8	E	3	Short run vs. Long Run
9	E	3	Profit Maximization
10	A	4	Monopoly Price/Output
11	D	4	Consumer Surplus
12	C	4	Maximizing Total Revenue
13	E	5	Competitive Labor Market
14	B	5	Competitive Labor Market
15	E	6	Public Goods
16	B	1	Investment and Growth
17	C	1	Production Possibilities
18	C	2	Demand
19	D	2	Cross-Price Elasticity
20	A	3	Efficiency
21	B	2	Marginal Utility
22	D	3	Costs of Production
23	B	3	Perfect Competition
24	B	3	Long Run Average Costs
25	E	4	Monopoly and Profit
26	C	4	Monopolistic Competition
27	E	4	Monopolistic Competition
28	C	5	Least-Cost Combination
29	D	5	Minimum Wage
30	B	6	Public Goods

Q#	Ans.	Unit	Topic
31	D	1	Opportunity Cost
32	D	2	Law of Supply
33	E	2	Supply and Demand
34	D	2	Elasticity of Demand
35	B	2	Consumer Surplus
36	D	4	Maximizing Total Revenue
37	B	3	Costs of Production
38	A	2	Supply and Demand
39	B	3	Shut Down Rule
40	D	4	Regulating Monopolies
41	D	4	Game Theory
42	E	4	Price Discrimination
43	C	5	Competitive Labor Market
44	A	4	Externalities
45	A	6	Anti-Trust Laws
46	B	1	Comparative Advantage
47	C	2	Demand Shifters
48	C	2	Demand Shifters
49	D	2	Price Controls
50	C	2	Income Elasticity
51	A	3	Costs of Production
52	C	3	Long Run Production
53	D	3	Economic Profit
54	D	4	Efficiency
55	B	4	Monopolies
56	C	4	Market Structures
57	B	5	Competitive Labor Market
58	A	3	Costs of Production
59	C	6	Negative Externalities
60	D	6	Income Inequality