

1. Consider the builders of new homes.

A. Define the term "**price elasticity of demand**".

B. **Based on the three factors** that determine whether the demand for a product is relatively elastic or relatively inelastic, would the demand for new homes be relatively elastic or relatively inelastic? **EXPLAIN WHY.**

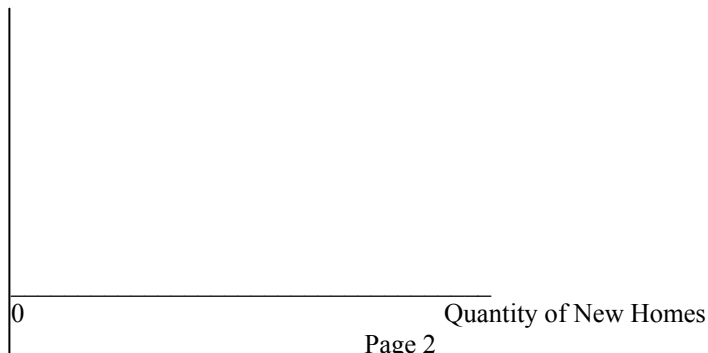
C. Define the term "**price elasticity of supply**".

D. **Based on the factors** that determine whether the supply of a product is relatively elastic or relatively inelastic, would the supply of new homes be relatively elastic or relatively inelastic? **EXPLAIN WHY.**

E. In the space below, **draw** the demand and supply curves for avocados. Be sure to draw both curves **as you described them in parts B and D.**

F. Finally, on the graph that you have drawn, show the results of a reduction in logging that reduces the amount of wood available. **Explain why** you made the changes that you did and **explain what will be the results** for the price of homes and the quantity of homes produced and sold. **What will happen to the revenues of the home builders? Why?** (30 points for the entire question)

Price



Page 2

2. The **fundamental problem** faced by all economies is called _____. (1 point)

3. **Three main questions** that every economy must answer are: (3 points)

1.

2.

3.

4. Define the term "**capital**". Give an **example** of anything that would be classified as capital: (3 points)

5. Define the term "**opportunity cost**". You decide to take an additional class this semester. It meets every other Saturday and Sunday afternoon. What is the **full opportunity cost** of this decision? (4 points)

6. In this course, a **procedure for making rational decisions** was presented. Briefly **describe** this procedure. Illustrate your answer by using this procedure to determine **how long you will attend college**. Consider the choices as: (1) no college; (2) a two year degree or certificate; (3) a Bachelors Degree; (4) a Masters' Degree and (3) a Ph.D. (5 points)

7. Tom can work in the labor market for \$50,000 per year or can do work at home worth \$5,000 per year. Mary can work in the labor market for \$250,000 per year or can do work at home worth \$20,000.

Who has the **absolute advantage** in working in the labor market? **Why?** (1 point)

Who has the **absolute advantage** in working at home? **Why?** (1 point)

Who has the **comparative advantage** in working in the labor market? **Why?** (2 points)

8. At the beginning of 1999, there was an increase in the tax on cigarettes. Would the **incidence of this tax** be mostly on the consumers of cigarettes or on the cigarette companies? **Explain why.** (Your grade on this question is based on your reasoning as to **the determinants of the incidence of a tax.**) Show in your answer that you know **what "incidence" means.** (5 points)

9. "**The cross elasticity of demand between Products X and Y is + 2.0**". What does this **statement mean** and what does the number tell you about X and Y? (3 points)

10. "**The income elasticity of demand for Product X is -3**". What does this **statement mean** and what does the number tell you about X? (3 points)

11. What does the following statement **mean**: "the demand for Product X is **more inelastic** than the demand for Product Y"? (2 points)

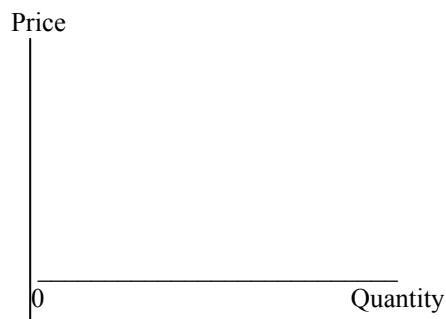
12. What does the following statement **mean**: "the demand for Product X is **perfectly inelastic**"? (2 points)

13. CHOOSE **ONE ONLY** OF THE FOLLOWING: (10 points)

What is a **price ceiling**? Use **an example presented in class or in the text** to **explain the results** of a price ceiling. Show the situation on a graph.

OR

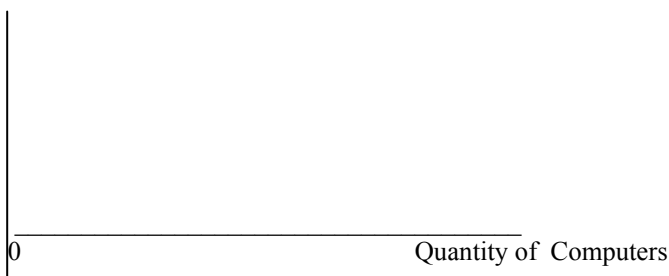
What is a **price floor**? Use **the case of agricultural price supports** presented in the class to **explain the results** of a price floor. Show the situation on the graph.



14. Assume that the market for **computers** begins in equilibrium. Then, **both** of the following occur: (1) the incomes of computer buyers fall and (2) the costs of the materials used to produce computers fell. Show the situation and the changes on the graph below.

As a result of these changes, **the price of computers** will _____ and the **quantity of computers** will _____ (in both cases, answer "rise", "fall", or "cannot be determined"). (5 points)

Price



15 Describe the process that has been called **the "invisible hand"**. Illustrate your answer with **graphs** showing how the market responds to a **change in buyers' tastes** and to a **change in the relative scarcity of the factors of production**. In your answer, be sure to specify **the functions of the price** in determining the allocation of society's resources. (10 points)

16. Assignment to be Turned In (10 points)

Economics 102

Answers to Examination #1

Spring 2000

1. The price elasticity of demand is the percentage change in quantity demanded divided by the percentage change in price.

The demand for homes would probably be elastic, as there are many substitutes and homes take a high percent of most people's incomes.

The price elasticity of supply is the percentage change in quantity supplied divided by the percentage change in price.

This depends on the rise in costs as quantity produced rises. It is likely that the quantity of new homes built would rise rather quickly as the prices rose. This would make supply relatively elastic.

If you said "inelastic", the curves should be steep. If you said "elastic", the curves should be flat.

The reduction will reduce supply, shifting supply to the left, but not shift demand. There will be a shortage, causing prices to rise. The result is that prices are higher and that less new homes are produced. If demand is relatively elastic (inelastic), the total revenues will fall (rise).

2. scarcity 3. what to produce; how to produce; for whom to produce (not how much!)

4. Capital is made by people for the purpose of being used in production ---any machine, equipment, building, etc.

5. Opportunity cost is the value sacrificed whenever a decision is made. Do not use the word "cost" to define cost! The full cost includes money expenses, such as gasoline, parking fees, tuition, etc., and the value of whatever would have been done on those days (including time spent studying).

6. Take the units one-at-a-time. In each case, ask what is the marginal benefit and what is the marginal cost? If the marginal benefit is greater than the marginal cost, choose it and go-on to ask about the next unit. If the marginal benefit is less than the marginal cost, don't do it and stop. Should you go to college for one year? The marginal benefit is the additional income you expect you receive (+ other benefits). The marginal cost is the money charges and the value of the time sacrificed. If you expect the marginal benefit is greater, go for one year. Continue the procedure for the second degree. When the expected marginal benefit of another degree is less than the opportunity cost, stop going to college.

7. Mary for she can earn more; Mary for she can produce more at home; Mary, for her opportunity cost of working in the labor market is lower

8. The incidence of the cigarette tax would be more on the companies if the demand for

cigarettes were elastic. It would be more on the consumers if the demand were inelastic. The price elasticity of demand would be greater the more substitutes there are, the longer the time under consideration, and the greater is the price in relation to people's incomes. For those who already smoke, the demand is likely to be inelastic. For young people considering starting smoking, the demand is likely to be much more elastic.

9. The cross elasticity of demand is the percentage change in the demand for one product (+2%) if there is a given percentage change in the price of another product (1%). + 2.0 indicates that the products are substitutes.

10. The income elasticity of demand is the percentage change in the demand for a product (-3%) if there is a 1% change in income. This product is an inferior good.

11. If the price of Product X and Y both rise by the same percent, the quantity demanded will decrease less for Product X.

12. If the price of product X rises, the quantity demanded of X will stay the same.

13. A price ceiling means that the price is held below equilibrium. As a result, quantity demanded is higher and quantity supplied is lower. There are shortages. Rationing is done by first-come, first-served, by seller choice, or by government. There may be black or gray markets (other charges or less product). See the graph in the text. You need an example.

A price floor means that the price is held above equilibrium. As a result, quantity demanded is lower and quantity supplied is greater. There are surpluses. The surpluses are stored and then sold to other countries at below market prices or given away. Farmers win while taxpayers and consumers lose.

14. Demand shifts left while supply shifts right. The quantity cannot be determined. But the price will definitely fall.

15. The decision of "what to produce" is made by buyers' tastes (backed up by income). You could show this --- with the graphs--- as a change in tastes for or against a product. Here you would have a shift in demand. It is also made according to the relative scarcity of factors of production. You could show this by having a factor become more scarce. Here you would have a shift in supply to the left. The price provides information to both buyers and sellers and also provides incentives to do what is socially desirable (i.e., to produce what buyers desire or to conserve on scarce factors). Acting in one's self-interest leads to behaviors in the social interest.

16. Your own article.

Economics 102
Fall 2001
Examination #2

Name _____
Total Score _____

1. In the philosophy of the market system (i.e., laissez faire), **what are the appropriate functions for government?** Why must these be done by government? Be sure to **define all technical terms**. (10 points)

2. The following are cases from the reading material of Chapter 10. **CHOOSE ONE ONLY**. Then, use one or more of the appropriate functions of government you just described to explain why there is a problem and what might be done to correct it. (4 points)

1. highway congestion **OR** 2. subsidies for baseball stadiums **OR** 3. water problems in California **OR** 4. over-fishing

3. What is the **"special interest effect"**? Use the special interest effect to explain why the Price Support Program buys farm surpluses to aid farmers, when farmers are a small part of the population, while raising taxes and food prices for millions of people. (5 points)

4. What is **the law of diminishing marginal utility**? Be sure to define "marginal" and "utility" and **explain how utility is measured**. (5 points)

Use the law of diminishing marginal utility to explain why diamond, which is relatively unimportant, is much more expensive than water, which is essential to life. (5 points)

5. According to Chapter 11, for **private property rights** to lead to socially desirable results, they must be _____, _____, _____, and _____ . (4 points)

6. A person took \$1,000,000 out of a savings account to start a business. The savings account had been paying an interest rate of 10%. The person also quit a job to work in the business; the job had been paying \$100,000 per year. During the year, the capital cost \$500,000, the hired labor cost \$600,000, and the natural resources cost \$500,000. In the year, the sales revenue was \$2,000,000.

The **explicit costs** were _____

The **implicit costs** were _____

The **fixed costs** were _____

The **variable costs** were _____

The **economic profits** were _____

SHOW ALL CALCULATIONS. (10 points)

7. What is the **law of diminishing (marginal) returns**?

Why is it true? (5 points)

8. "As the owner of this company, I earned an **economic profit of \$0.**" Explain what this means. (3 points)

9. If the marginal physical product is **rising**, the marginal cost must be _____ (rising or falling?). (1 point)

10. In drawing the cost curves, it was noted that as the quantity produced increases, the **average total cost curve falls** up to some point. **Explain why**. (5 points)

11. In drawing the cost curves, it was noted that as the quantity produced increases, beyond some point, **the average total cost curve rises**. **Explain why**. (5 points)

Quantity	Total Fixed Cost	Total Variable Cost	Total Cost
1	\$300	\$ 30	\$330
2	300	70	370
3	300	120	420
4	300	180	440
5	300	250	550
6	300	330	630
7	300	420	720
8	300	520	820
9	300	630	930
10	300	750	1050

If 5 units are produced, the **average fixed cost** is \$_____

If 9 units are produced, the **average variable cost** is \$_____

If 5 units are produced, the **average total cost** is \$_____

The **marginal cost** of the 6th unit is \$_____.

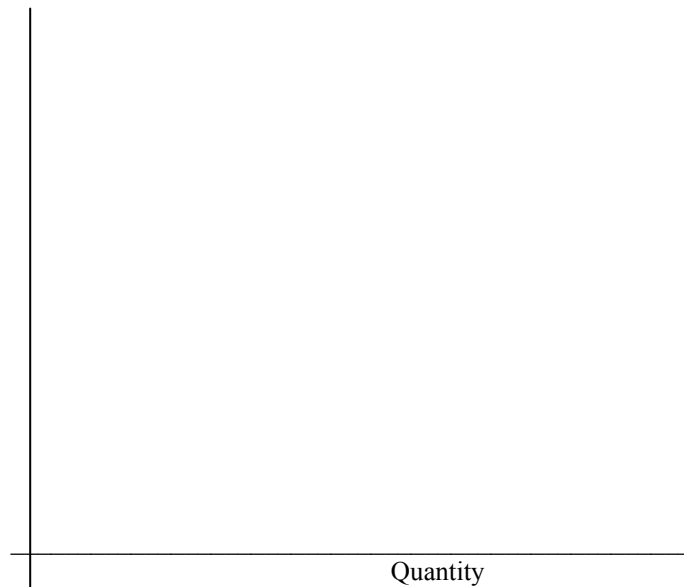
SHOW ALL CALCULATIONS. (8 points for the entire question)

13. Define the term "**economies of scale**" and explain why they exist. (5 points)

14. **Briefly define** the following terms: (2 points each)

1. Perfect Competition
2. Pure Monopoly
3. Monopolistic Competition
4. Oligopoly

15. In the space below, draw **the average fixed cost, the average variable cost, the average total cost, the marginal cost, and the marginal revenue (for a company in perfect competition)**. Be sure that they are in proper relation to each other. **Show the profit-maximizing quantity and the economic profits.** (10 points)



16. In 2000, several computer manufacturers had economic losses that totaled many billions of dollars. Yet, for much of this time, the companies continued to produce computers and did not shut down. How do you explain the fact that **they continued producing, even though they were making economic losses?** (5 points)

17. The **short-run supply curve** for a company in perfect competition is its

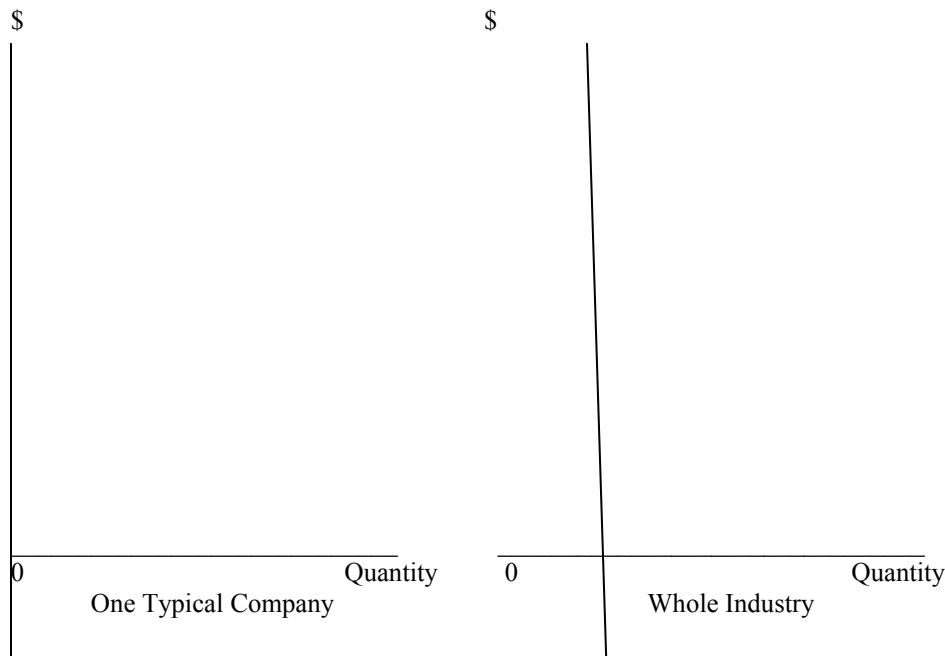
_____ curve, but only the part above the

_____ . (2 points)

1. Government provides the rules, such as property rights, contract laws, etc. It promotes or maintains competition. It provides information to markets. It provides public goods (those for which one can be a free rider, which are non-rival, and which are indivisible), controls negative externalities and subsidizes positive externalities (effects on others not considered by the decision-maker), provides certain merit goods (private goods which government wants people to have, such as health care), and redistributes income according to need. The market, left alone, would fail to do these.
2. See the material in Chapter 10 for the examples. Highway congestion is a case of a negative externality. Baseball stadiums are an example of a positive externality. Water problems and over-fishing involve problems with the specification of property rights.
3. A special interest is one which uses the political process to gain income by having it transferred from others. In this case, the farmers represent a small group, each of whom gains greatly from the program. They lobby to have it enacted. Consumers and taxpayers represent a large group, each of whom loses only a little from the program. And consumers face the public goods problem of organizing a lobbying group. The result is that the program becomes law.
4. The Law of Diminishing Marginal Utility: as we consume more of a product, the additional satisfaction we get from one additional unit diminishes. Utility is measured by the maximum amount one would give up for a unit of the product. Since we get less additional satisfaction from an additional unit, water is inexpensive (since there is so much of it). Since there is little diamond, the last unit yields great utility. The value is determined by the marginal utility of the last unit.
5. Clearly specified, exclusive, transferable, enforceable
6. Explicit costs: $\$500,000 + \$600,000 + \$500,000 = \$1,600,000$
Implicit costs: $\$100,000 + 10\% \text{ of } \$1,000,000 = \$200,000$
Fixed costs: $\$500,000 \text{ (capital)} + \$200,000 \text{ (implicit cost)} = \$700,000$
Variable Costs: $\$600,000 \text{ (labor)} + \$500,000 \text{ (resources)} = \$1,100,000$
Economic profit: $\$2,000,000 - \$1,800,000 = \$200,000$
7. If one factor is fixed, then as more of the variable factor is added, beyond some point, the addition to production (marginal physical product) diminishes. This occurs due to the limited amount of capital.
8. 0 economic profit means that the owners of the company are earning no more than they could earn in their next best alternative.
9. falling
- 10,11. Average total cost falls because (1) of the spreading of the fixed cost and (2) because of declining average variable cost due to specialization & division of labor. Average total cost rises because the decline from spreading the fixed cost becomes slight while the average variable cost rises due to inefficiencies (limited capital, too much bureaucracy, too many supervisors)
12. $\$300 \text{ divided by } 5 = \60
 $\$630 \text{ divided by } 9 = \70
 $\$550 \text{ divided by } 5 = \110
 $\$630 - \$550 = \$80$
13. Economies of scale: as the quantity produced increases, the size of the plant increases, and the minimum point on the average cost falls (i.e., the long-run average cost is falling). This results because of a technology where large plants, with high fixed costs, can spread the fixed costs over so many units that the cost per unit is lower than can possibly be achieved in smaller plants.
14. So many sellers that no one can affect the price; perfect information; easy entry and exit; identical products
One seller with high barriers to entry and relatively inelastic demand
One seller but many close substitute products; easy entry and exit; good information
Few sellers with high barriers to entry
15. See the graph in the text in Chapter 16.
16. Computer manufacturers will continue to produce if they believe that the revenues from the computers it sells will cover the variable costs of producing (electricity, workers, materials, and so forth). This is the short-run.
17. marginal cost curve above the average variable cost

Examination #3

1. Assume that an industry is a perfectly competitive industry. Assume also that it is a **constant cost industry**. Show the **market demand and supply** as well as the equilibrium price and quantity in the graph on the right. In the graph on the left, show the price, marginal revenue, marginal cost, and average total cost for **one typical seller** in long-run equilibrium. Then, show the results of an **increase in the demand for the product**. Assume that the industry **begins in long-run equilibrium** (be sure to define this in your answer). In the space, **explain** what will result in the **short-run** (define this). Then, **explain** what will result in the **long-run** (define this). Show the short-run changes and the long run changes on the graph. Label carefully. (15 points)



2. In this class, it has been argued that perfectly competitive industries are good for society and that pure monopolies are bad for society. Explain why this is so. In your answer, **name and explain at least 5 benefits to society from perfect competition**. (10 points)

- 1.
- 2.
- 3.
- 4.
- 5.

Quantity	Total Cost	Price	Total Revenue	Marginal Revenue	Marginal Cost
0	\$ 90	\$145			
1	170	140			
2	260	135			
3	360	130			
4	470	125			
5	590	120			

If the goal of this monopolist is to maximize profits, how many units should be produced? _____

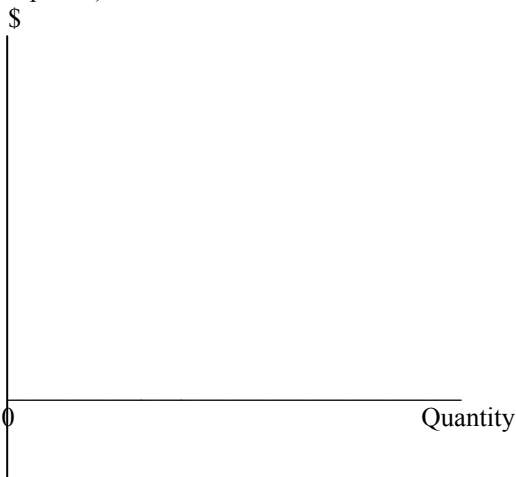
What price should be charged? _____

How much economic profit is earned? _____

SHOW ALL CALCULATIONS. (10 points)

4. In the graph below, draw the demand, marginal revenue, marginal cost, and average total cost for a **monopolist**. Show the **profit-maximizing quantity**, the **price** that should be charged, and **the economic profits**. (DO NOT RELATE YOUR GRAPH TO THE NUMBERS ON PAGE 2)

(10 points)



5. Until recently, San Diego Gas and Electric has been considered an example of a "**natural monopoly**". What are **the conditions that cause natural monopolies to exist**? (Be sure to show that you know what "natural monopoly" means and **why** these conditions lead to natural monopolies.) (5 points)

6. **Use the principles concerning price discrimination** to explain why hardback books sell for a price so much higher than paperback books, when the difference in the cost of production of the two types of books is very small. (5 points)

7. Assume the following percent of sales in an industry:

Company 1	30%	Company 5	10%
Company 2	20%	Company 6	10%
Company 3	10%	Company 7	5%
Company 4	10%	Company 8	5%

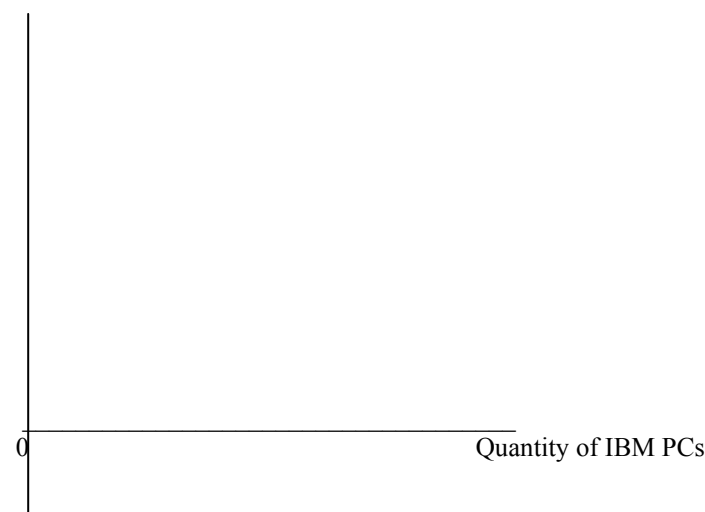
The **concentration ratio** is equal to: _____
By this measure, the industry would be considered _____ (effectively competitive, weak oligopoly, or strong oligopoly?)

The **Herfindahl Index** is equal to: _____
By this measure, the industry would be considered _____ (effectively competitive, weak oligopoly, or strong oligopoly?)

If Company 7 and Company 8 wished to merge, would the merger be approved under the Merger Guidelines. _____ (yes or no?) Why or why not? _____

SHOW ALL CALCULATIONS. (5 points)

8. On the graph below, show the situation for a company in **monopolistic competition**. The company is IBM. Show the situation that results in the **short-run** just after IBM introduced the PC. The PC was very popular and IBM made a high economic profit. Then, show the situation in the **long-run** after Compaq, AST, and others started selling their IBM "clones". Explain what you did on the graphs and explain what will result for IBM. (10 points)



9. **CHOOSE ONE ONLY OF THE FOLLOWING TWO QUESTIONS:** (10 points)

What is a "**cartel**"? It has been claimed that the gasoline companies (Shell, Mobil, Unocal, etc.) in San Diego County act as a cartel. Imagine that these gasoline companies decided to form a **cartel**. How would this cartel operate? Using the conditions that would be necessary for this cartel to be effective, is it likely that this cartel would be effective? Why or why not?

OR

In this section of the course, we have considered the factors that determine people's wages in a market economy with perfect competition. Twenty years ago, female workers earned about 60% of the earnings of males workers. Today, the figure is close to 75%. Use these factors to explain **possible reasons for the fact that the pay gap between female workers and male workers has been narrowing**. Consider as many possible reasons as you can.

10. A company has the following production function:

<u>Labor</u>	<u>Total Product</u>	<u>Marginal Revenue Product</u>	<u>Marginal Resource Cost</u>
1	35,000		
2	60,000		
3	80,000		
4	95,000		
5	105,000		

If the company sells its product in a perfectly competitive product market at a **price of \$2 each** and hires its labor in a perfectly competitive labor market at a **wage of \$40,000** per year, how many workers should it hire? **SHOW ALL CALCULATIONS.** (5 points)

11. For each of the following mergers, state whether it is **horizontal, vertical, or conglomerate**. Then, explain why. (2 points each)

1. Albertsons Grocery Company bought Lucky. This merger is _____ because _____.

2. NBC, the national television network, bought KNSD Channel 39 in order to show its programs. This merger is _____ because _____.

12. Define **“substitution effect”** and **“income effect”**. Then, **use these terms** to explain the increase in the labor force participation rate for married women with small children over the past 30 years. (5 points)

13. Define **THREE ONLY** of the following terms (2 points each) (Do not do more than three)

1. Human Capital
2. Statistical Discrimination
3. Union Shop
4. Craft Union
5. AFL-CIO

1. The graph is done in class. The increase in demand is a shift to the right. The price rises, raising the marginal revenue for the firm. At a higher marginal revenue, the quantity produced rises as do the economic profits. In the long-run, new competitors enter. The supply increases – shifts right. The price falls until the economic profits are back to zero. In the long-run, the quantity produced has increased, as consumers desire.
2. Some of the benefits you might include are:
 - a. In the long-run, economic profit equals zero.
 - b. Short-run economic profits motivate sellers to enter industries that produce products consumers desire, to lower costs, and to improve products.
 - c. In the short-run, sellers will produce whatever quantity is being produced as efficiently as possible.
 - d. In the long-run, markets will guide sellers to produce that quantity at which average total cost is at its minimum.
 - e. Because the price equals the marginal cost, society's resources are allocated to the most efficient uses.

Quantity	Marginal Cost	Marginal Revenue
1	\$80	\$140
2	90	130
3	100	120
4	110	110
5	120	100

Produce 4 because MR is equal to MC

Price = \$125; Profits = \$500 - 470 = \$30

4. The graph is in your book.
5. A natural monopoly results when there are economies of scale over the entire market --- due to a very high portion of the total cost being fixed (capital) and to a small market. If there were more than one company, the companies would engage in price wars because each would have excess capacity. All but one would be driven-out of business.
6. Treat this as an example of price discrimination. There are 2 markets, which are separated. The company will charge a higher price to those whose demand is more inelastic. They charge a lower price to those whose demand is more elastic. Those whose demand for the book is relatively inelastic reveal themselves by their buying the hardback copy and paying the higher price. Those whose demand is relatively elastic wait for the paperback.
7. Concentration ratio = $30 + 20 + 10 + 10 = 70\%$ (Strong Oligopoly)
 Herfindahl Index = $900+400+100+100+100+100+25+25= 1750$ (Weak Oligopoly)
 Company 7 and 8 merging raises the Index from 1750 to 1800. This is less than 100 points.
 The merger would be allowed.
8. The graph is in the text. The increase in demand for the PC means that your graph needs to begin with an economic profit (Price - ATC times Quantity) above zero. In the long-run, new sellers will enter. They will decrease the demand as seen by this one seller. Demand and marginal revenue shift left to the point where economic profits equal zero, the original point.
9. A cartel is a group of sellers who get together to set the price --- i.e., to act as a monopoly. They must be able to estimate the costs and the demand. From these, they can determine the profit-maximizing quantity and price for the group. Production quotas must be set to divide the quantity produced. The profits must be distributed among the members in some agreeable way. To be effective, there should be few sellers. There are few gasoline companies in San Diego. It is helpful if the sellers have a similar product and similar costs, which they basically do. To succeed, cartels need high entry barriers and relatively inelastic demand, which they do have as well. In a cartel, there is an incentive for a member to lower the price and thus sell much more, at the expense of the other members. By doing so, the company can increase its own revenues. The cartel must be able to prevent this "cheating"! The cartel would probably be effective if it could control the cheating. The evidence from the 1960s indicates that they could not do this for very long!
- 9B. Factors you could consider include: the reduced prices for goods produced by men due to greater competition; the use of more capital per worker for women, greater education and training for women, lower statistical discrimination; more specific job skills for women due to greater job experience, etc. For other points, see Chapter 26.

<u>Labor</u>	<u>Marginal Revenue Product</u>	<u>Wage</u>
1	\$70,000	\$ 40,000
2	50,000	40,000
3	40,000	40,000
4	30,000	40,000
5	20,000	40,000

Hire 3. The 4th worker brings in less than he or she costs. (The marginal revenue product is calculated as MPP times price.)

11. Horizontal because they are both grocery companies – in the same industry.
Vertical because Channel 39 used to buy programming from NBC.

12. Substitution Effect: as wages rise, the opportunity cost of “not working for pay” rises. Therefore people work more. Married women are more likely to work as their wages rises. Their wages have risen as the economy has shifted from manufacturing jobs to service jobs, as women have more education and experience, etc. Income Effect: as wages rise (fall), incomes rise (fall); since people desire more (less) leisure as their incomes rise (fall), they work less (more). Married women are more likely to work as the real incomes of young married men fell (a result of the increased supply as the baby boom came of work age) and as the desired standard of living rose.

13. Human Capital: the skills embodied in a person

Statistical Discrimination: treating an individual as typical of a group the person is part of

Union Shop: anyone can be hired, but must join the union within 30 days

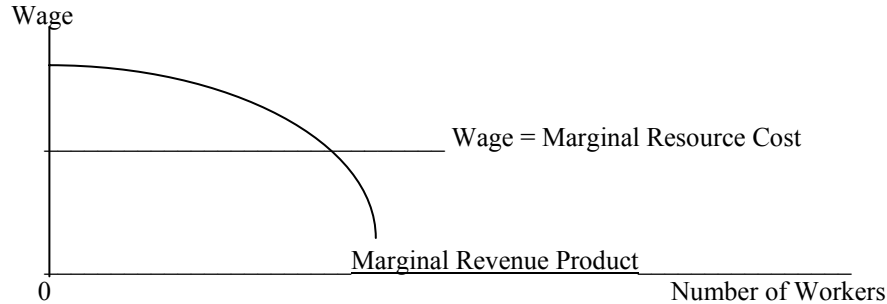
Craft Union: a union organized so that all who have the same skill are in the union

AFL-CIO: the main labor organization. It helps organize unions and does political activities on behalf of union interests.

1. Now assume that this company hires its workers in a perfectly competitive labor market. The going market wage is \$6.00 per hour. The graph below shows the original situation for this company as an employer.

Show the results of the changes that occurred in question 1 in **the short-run** on the labor market. Then, show the results that occurred in question 1 in **the long-run** on the labor market.

Explain why you made the changes that you did. Then, state what will result in the labor market. (10 points)



2. **What are the factors** that will determine whether the demand for a given group of workers is relatively elastic or inelastic?

- 1.
- 2.
- 3.
- 4.

Finally, **use these factors** to explain the results of the recent increase in the minimum wage in California to \$5.75 in 1997 (above the minimum wage in other states) as a result of Proposition 210. (10 points)

2. Both the increase in price and the increase in quantity will increase the demand for labor --- shift it to the right. The result is that the number of workers hired rises. In the long-run, this reverses itself, returning to the original point. However, there are more workers hired in the industry as a whole, because of the increased number of sellers.

4.

Conglomerate because they are unrelated companies.

6. The Herfindahl Index is 1734. If the merger takes place, the new Herfindahl Index would be 1800. Since the increase is only 66, the merger would be allowed.

7. Section 1 makes conspiracy in restraint of trade illegal. This includes price fixing (cartels), certain forms of price discrimination, interlocking directorates, and so forth. Also, horizontal mergers that significantly reduce competition are illegal. Section 2 makes monopoly per se illegal.

8. The wage elasticity of demand is the percentage change in quantity demanded of labor if there is a given percentage change in the wage.

Factors affecting the wage elasticity of the demand for workers include:

1. the availability of substitutes for the workers (more substitutes = more elastic)
2. time (longer = more elastic)
3. the importance of labor cost as a percent of the total cost (higher labor cost = more elastic)
4. the elasticity of the demand for the product (more elastic demand for the product equals more elastic demand for labor)

Since minimum wage workers are relatively inexpensive and since there are few substitute workers, few would lose their jobs. The rest would receive higher wages. The overall amount paid to these workers would probably rise. In pure competition, this could be analyzed as an overall rise in wages (a variable cost).