

Content Domain III: Microeconomics: Elements in the Marketplace



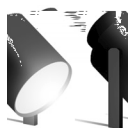
A LOOK AT CONTENT DOMAIN III

Test questions in this content domain will measure your understanding of economic elements in the marketplace. Your answers to the questions will help show how well you can perform on the following standards:

- ★ Price determination
- ★ Economic exchange
- ★ Types of businesses
- ★ External economic factors
- ★ Types of market structures
- ★ Influence of organized labor
- ★ Current labor issues
- ★ Role of regulatory agencies

As mentioned in Content Domain I, microeconomics studies the interaction of people and businesses (also called “firms”) within a market. Business managers use microeconomic ideas to make decisions about how much to produce, how to price the goods and services they produce, and what wages to pay for the work they need done. These ideas are critical to running a successful business. If you understand them, you should be able to predict how consumers and producers will behave. For example, suppose a firm drastically reduces its prices without reducing the quantity or quality of its output. Microeconomic theory suggests that other firms in that market will react to that decision. Some firms will decide to reduce their prices while others may shut down because they are no longer able to remain competitive.

This example shows how firms can affect the markets in which they produce. In addition, Content Domain III also discusses how markets are affected by external factors such as federal regulatory agencies and natural disasters.



Spotlight on the Standards

★ **Price Determination** ★

You have already seen how the interaction between a producer’s supply curve and consumers’ demand curve can determine an equilibrium price and quantity. (You can turn to page 16 to refresh your memory.) Prices, however, are rarely stable over a long

period of time. Many factors can affect the supply or demand curves within a market. Here are some of the factors that can affect the price and quantity of a good.

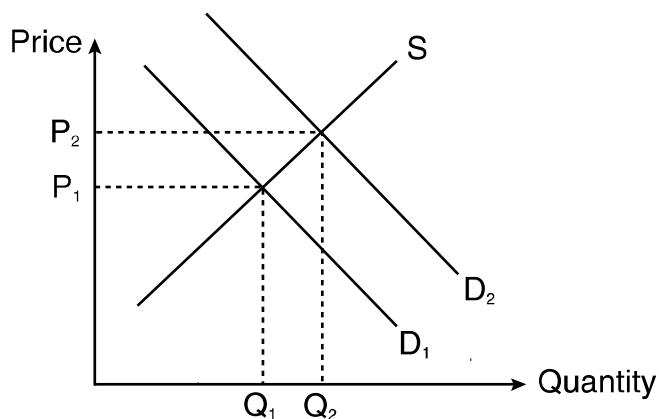
Factors Affecting Price Determination

1. **Cost of inputs.** On page 16, the discussion focused on the market for plastic furniture. In order to make plastic sofas you need raw plastic to mold into the proper shape. Plastic, then, is called an “input,” an ingredient in this particular production process. Raw materials, however, are not the only input. Labor and equipment are also considered inputs because, just like plastic, they are used to produce plastic furniture.

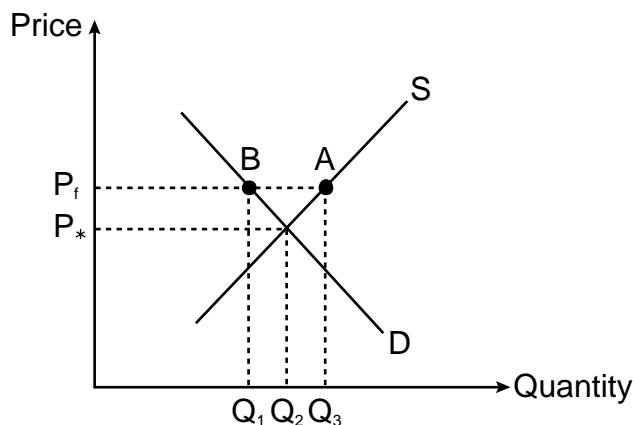
If the price of an input rises, it will be more costly to make plastic furniture. The higher price of inputs will be reflected in an increase in the price of plastic furniture. This increase in input prices would cause the supply curve to shift to the left. This, in turn, would cause the price of plastic furniture to rise.

2. **Changes in technology.** Advances in technology often make it cheaper or easier to produce a good or service. This is similar to 1. in that these technological advancements reduce the cost of using inputs, causing a shift in the supply curve to the right.
3. **Changes in prices of other goods.** Suppose the Second Time Sofa Company can switch its manufacturing process and make plastic flamingoes as well as plastic furniture. If demand for plastic flamingoes increases sharply, Second Time Sofa might want to shift their production process and make more plastic flamingoes (a hot selling item) and fewer plastic sofas. The higher price of another good (plastic flamingoes) would lead to a decrease in the supply of another good (plastic sofas).
4. **Substitute goods.** A substitute good is just what its name suggests: it is a good that satisfies most of the same needs as the original good. In our example, wooden furniture would be a substitute for plastic furniture. If plastic furniture becomes very expensive, many people might decide to buy the relatively cheaper substitute good (wooden furniture) instead. This would cause demand for plastic furniture to decrease.
5. **Complementary goods.** Complementary goods tend to be used together, so supply and demand for each good tends to move in unison. For example, a special disinfectant for use on plastic furniture would be a complementary good to plastic sofas. If the demand for plastic sofas increases, then the demand for the complementary disinfectant will increase as well.
6. **Changes in income.** Fluctuations in income often cause a consumer’s demand to change. An increase in income often leads consumers to buy more goods. Therefore, an increase in income shifts a demand curve to the right, while a decrease in income shifts a demand curve to the left.

7. **Change in preference.** Sometimes what is fashionable or chic determines the demand for a good. Suppose Hank Garza, the nation's leading movie star, mentions that his entire 53-room mansion is filled with plastic furniture. This might cause many of Garza's fans to want to buy plastic furniture, causing demand to rise.

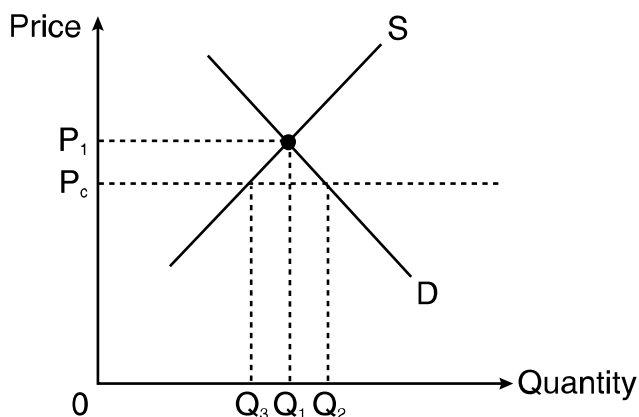


Price can also be affected by outside forces such as government legislation. For political reasons, a government might set a price floor or ceiling on a good or service. A **price floor** sets a minimum price for which a product can be sold. Sometimes this minimum is never reached, making the price floor irrelevant. However, sometimes a situation arises like the one below:



With no price floor, this market would reach equilibrium at price P_* and quantity Q_2 . However, the price floor, P_f , causes producers to supply amount Q_3 (point A) even though demand is just Q_1 (point B). This creates a surplus of the good that is equal to the amount $(Q_3 - Q_1)$.

A **price ceiling** is similar to a price floor, although it creates a *maximum* price at which a good can be sold. This can lead to problems shown in the following graph:



With no price ceiling, the equilibrium price of this market would be at price P_1 and quantity Q_1 . However, the ceiling limits prices to P_c . This leads to a demand of Q_2 units with only Q_3 units being supplied. This creates a *shortage* of good X equal to the amount $(Q_2 - Q_3)$.

☆ **Economic Exchange** ☆

Before money was used, it was hard for watermelon farmers to buy chandeliers. To understand why this was so, consider a **barter system**, in which one set of goods is exchanged for another in some proportion. In a barter system, a watermelon farmer would offer to exchange his good (watermelons) for the good he wants (chandeliers). Chandeliers are very expensive to make, so the exchange rate might have been something like 100 watermelons for 1 chandelier. Storing 100 watermelons takes up a lot of space, and how many people like to eat 100 watermelons? Chances are good that the farmer would never get his chandelier, because the barter system would not work to facilitate an exchange between a chandelier maker and a watermelon farmer.

The circumstances change if money is used. With money, goods have prices (instead of exchange rates), such as \$100 dollars for a chandelier and \$1 for a watermelon. The farmer can now set up a stand and sell his goods for \$1 each, and after he sells 100 watermelons, he can use the money earned to purchase a chandelier. This shows money in its primary usage, which is as a **medium of exchange**. Money is used in all facets of the economy.

Besides being a medium of exchange, money serves two other functions. It acts as a **standard of value**, which means it allows you to understand how much something costs in terms of other items. For example, if someone brags about spending \$500 on a watermelon, you know this person paid way too much. This is because most consumers have a good idea about how much certain things should cost or, in other words, what their standard of value really is.

Money also acts as **store of value**. This means that money can be saved and spent later. In other words, money is a way to store wealth so that someone can buy goods and services whenever they need to. Just imagine if you needed to work at a grocery store to earn groceries, or work in a kitchen every time you ate at a restaurant. Exchange would be very difficult. When money acts as a store of value, however, you can use it to buy groceries without having to work for the grocery store or eat at a restaurant without having to know how to cook.

In addition to having different uses, money also comes in different forms. The form you are most familiar with is currency, which consists of coins and paper money. There are also demand deposits at banks. When someone writes a check, he or she is using this form of money, which is typically kept in a checking deposit at a bank. Other forms of money include savings deposits as well as CDs (Certificate of Deposits). Money in these accounts tends to earn a better interest rate than money in a regular checking account, although they come with other restrictions.

★ *Types of Businesses* ★

There are many different types of business organizations, and each type has its advantages and disadvantages. The following list provides a brief review of three common types of business organizations.

Three Business Organizations

1. **Sole proprietorship.** A sole proprietorship has a single owner. Usually this means just one person is the owner/proprietor, but occasionally it might be a single family that retains complete ownership. The proprietor controls all the aspects of his or her business, from the factors of production to the finished product. By giving a single person all the important decision-making functions and power, sole proprietorships are often able to adapt their business practices quickly.

This flexibility does not prevent a proprietor from making *bad* decisions. However, there are disadvantages with having all the power of a company in the hands of one person.

Many restaurants are sole proprietorships. The unique menu and décor of such a restaurant can reflect the individual tastes of the owner. Changes in the menu are made by the owner, as are any decisions regarding expansion or capital improvement. If any capital repairs are to be done, the sole proprietor must pay for them, either out of the company's profits or the owner's own pockets. The fact that all money for improvement or repair must come from the sole proprietor tends to limit the amount of capital sole proprietorships can put back into a business.

If the business makes a profit, sole proprietors can use this money as they see fit. Some might put a percentage back into the business for repairs or research, while

another might take all the profits and place them directly into his or her personal bank account.

- 2. Partnerships.** In a sole proprietorship, a single person takes all the financial risks and reaps all the financial rewards, if there are any. A partnership divides up the risk and reward among a group of people. While some partnerships are as small as two people (with each sharing 50% of the risks and rewards), there is no limit to how large a partnership may be.

There are many different kinds of partners, such as silent partners and minority partners. In the art gallery example from earlier, Adelaide invests in her mother's art gallery for a certain percentage of the profits. If Adelaide has no say about how the art gallery is run, she would be considered a silent partner. Silent partners put up money and expect a return for their investment, but have no input in the day-to-day business affairs. Minority partners might have a say in how a business is run, but since they do not own the majority of the company, they must work to have their opinions considered by whoever owns the majority share.

Many law firms operate as partnerships. A group of lawyers can divide the cost of administrative work amongst themselves, thereby reducing the cost that each of them would accrue by having a personal assistant, copy machine, law library, and so forth. After paying out all the costs, the partners can then divide any profits amongst themselves equally, or in some agreed upon proportion. Sharing this reward leads to smaller individual portions, but it means a reduced chance of bankruptcy or failure. It is also easier for a partnership to accrue investment capital, since each partner can agree to pay a percentage in order to arrive at the needed amount.

- 3. Corporations.** Corporations issue stock, and anyone who owns stock in a company owns a portion of that corporation. Stockholders meet annually to determine a board of directors, and this group of people is responsible for guiding the company in the long run. A president or chief executive officer (CEO)—a person often hired by the board of directors—makes the major short-run business decisions.

The corporate structure has many advantages. One big advantage is the ease with which corporations are able to raise capital for investment by selling stock. This is a simple way to gain large amounts of money that can be spent on acquisitions or new business ventures. A second advantage is that individual shareholders (people who own the corporation's stock) are not financially responsible for any corporate debt or bankruptcy. If the corporation goes under, the shareholders do not. Of course, in that circumstance all the stock owned by the individual becomes mostly worthless.

Ownership in a company often entitles you to a share of the company's annual profits. Successful corporations often take a percentage of annual profits and issue **dividends**, which are monetary payments to stockholders. The dividend might be 10 cents a share, meaning a stockholder receives 10 cents for every share of the corporation he or she owns.

These two advantages (and others) have helped turn many corporations into multibillion-dollar businesses with operations all over the globe. Yet corporations do have their downsides. In large corporations, a massive bureaucratic structure leads to slow decision-making processes and some wasteful spending. Most large corporations simply do not react swiftly in the business world.

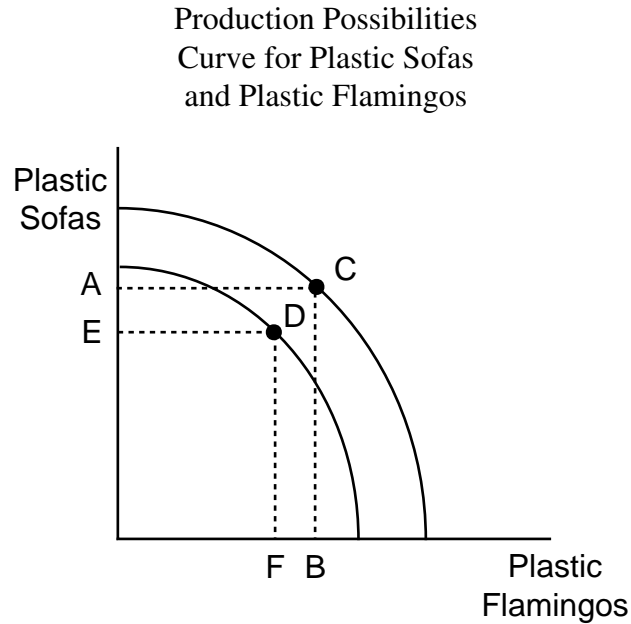
★ *External Economic Factors* ★

As you might imagine, natural disasters are not good for the economy. Catastrophic events like floods, tornadoes, earthquakes, and hurricanes can devastate an area, destroying factories, farms, and homes. Afterwards, people need money to rebuild their homes and offices. Of course, they can't go to work to earn this money—since their workplace has often been destroyed—so they must get capital reinvestment from somewhere else. Large corporations are often well suited for this problem, since they have an easy ability to raise capital to rebuild. Sole proprietors, on the other hand, might have to wait for insurance coverage or some government help in the form of a federal disaster relief fund.

Other external factors besides natural events can impact an economic area. These external factors have a negative effect if they disrupt the normal flow of goods and services fundamental to business. Political unrest may create uncertainty about the future, causing consumers to drastically curtail spending or leave an area altogether. Environmental pollution can cause public health issues, leading to high local medical costs and a reduced workforce. A high incidence of crime often reduces property values, slowing an area's economic growth.

These effects and others like them can be reflected on a graph known as the **production possibilities curve**. This curve represents all of the possible combinations of goods and services that an economy is able to produce with a fixed amount of resources. As shown in the following graph, most production possibilities curves are given for two products. In this case the two products are plastic flamingos and plastic sofas. When an economy is producing at point C, A represents the number of plastic sofas being produced and B represents the number of plastic flamingos being produced. Any negative disruption to the economy, like a hurricane or an increase in crime, reduces the amount of fixed resources in an economy. This, in turn, reduces the total amount of goods and services that an economy is able to produce. If the production possibilities curve shifted inward in the graph, all possible combinations of plastic flamingos and plastic sofas would be

reduced. This shift can be shown at point D, where point E represents the new amount of plastic sofa production and F represents the new amount of plastic flamingo production.



Production possibilities curves do not always shift in, however. Beneficial developments in technology or unusually favorable weather can expand the amount of goods and services that an economy is able to produce, given fixed resources.

★ **Types of Market Structures** ★

The structure of a market describes many of the important features of that market. These features might include:

- 1) number of firms in the market
- 2) barriers of entry, or the ease in which companies can enter or exit the market
- 3) products created, and whether or not these products are identical, very similar, or different
- 4) level of competition

There are four basic market structures that you should be prepared to see on the ***Economics/Business/Free Enterprise EOCT***. Each of them is discussed briefly below, in terms of the features mentioned above.

1. Monopoly

Number of firms: one

Barriers to entry: very, very high, if not insurmountable

Products: usually just one

Competition: none

Monopolies are very rare, but they do exist. Some monopolies are created when a firm gains a patent on a certain drug or machine, granting them the exclusive right to make

that product. Other times, governments create (and then regulate) monopolies in the interest of efficiency. Your local water company is a good example of a government-sanctioned monopoly. Running a water distribution plant requires a huge amount of capital startup, which makes it expensive for firms to get started (called a “barrier to entry”). Having a single water company is more cost effective than having two duplicate water companies running side by side because two water companies would need to lay separate pipes to individual homes. One water company, on the other hand, can cut costs significantly by running one set of pipes throughout their entire service area.

Monopolies are not always very favorable to the consumer. Since there is no competition, monopolies can decide on a price that maximizes their profits. This makes a monopolist a **price maker**, a company that has control over what it wants to charge people. This often leads to higher prices as well as some shortages, as demand for a good usually exceeds the amount the monopolist is willing to supply.

Think of the water company’s monopoly on water service. If you want to take a shower but you don’t want to use their services, what are you going to do?

2. Perfect Competition

Number of firms: unlimited

Barriers to entry: none or very, very little

Products: a single product that is similar throughout the market

Competition: unlimited

Perfect competition is the opposite of monopoly. Here, any firm can get into the market at very little cost. Suppose there was a market for dandelions. Growing dandelions requires little start-up cost. All you need are dandelion seeds, soil, water, and some sunlight. There is little difference between one dandelion and another, so the market has a homogeneous product.

In perfect competition, firms will keep entering the market as long as it is profitable. If a single dandelion sells for 5 cents and it costs 3 cents to grow one, then firms will keep entering this profitable market, increasing supply and driving down costs. When dandelions cost 3 cents to grow and sell for 3 cents, the market is in equilibrium and firms will stop entering the market.

Firms in a perfectly competitive market are **price takers**. They have no control over their own prices, which are determined by the market. In other words, no one will buy an over-priced dandelion. Why should they? A 4-cent dandelion is the same as the 3-cent one, so there is no reason to spend that extra penny.

3. Monopolistic Competition

Number of firms: a large number

Barriers to entry: low

Products: Products are similar but not exactly alike from one firm to another.

Competition: Firms must remain aware of their competitor’s actions, but they do have some ability to control their own prices.

Monopolistic competition takes its name and its structure from elements of monopoly and perfect competition. The key idea to understanding monopolistic competition is that firms sell products that are similar, but not exactly alike. Consider hand soap. Essentially, all hand soaps are the same. Yet firms can create a brand identity that separates their hand soap from their competitor's. This brand identity can be formed through packaging, product support, and especially advertising. If effective, consumers will positively identify a certain brand and purchase it even if another hand soap costs a little less.

The brand loyalty of consumers gives firms some control over their own prices. This control is not great, though. A hand soap that costs fifty dollars more than any other brand will probably not be purchased because most soaps are easily substituted for one another.

4. Oligopoly

Number of firms: few, often somewhere between 2-12 firms controlling a majority of the industry

Barriers to entry: high

Products: varies

Competition: All firms are very aware of each other's prices.

Whenever a few firms dominate an industry, you have an oligopoly. While there aren't many firms in any oligopoly, each firm is keenly aware of each other's prices and behavior. If Firm A lowers prices, it often does so expressly to take business from Firm B. Firm B must either respond by lowering prices, or take some other action if it does not want to lose market share to Firm A.

Some oligopolies are fiercely competitive, such as the soft drink industry or the airline industry. In other oligopolies, firms work together to set price and quantity. Since these firms effectively control a market, this cooperation creates a kind of monopoly called a **cartel**. Cartels can create artificially high prices and reduced quantity in order to maximize profits, but they are often illegal and very difficult to maintain.

STRATEGY BOX — What's the Theory?

Monopoly and perfect competition are exceptionally rare market structures; however, they represent important economic theories. Fragments of monopoly and perfect competition can be seen in monopolistic competition and oligopoly, two very common market structures. Understanding the two extreme cases is essential to understanding the two more common market structures.

★ *Influence of Organized Labor* ★

One hundred years ago in this country, many people worked in appalling conditions for incredibly low wages. Laborers often worked long hours and risked serious injury for meager amounts of money. These conditions persisted largely because these laborers did not have the power to change them.

Fortunately, labor conditions in the United States have come a long way since the turn of the 19th century. This country now has a minimum wage, and working conditions are much safer. There are many causes for this change, and the rise of labor unions is one of them.

The goal of any union is to organize all the workers in a factory, city, or industry, and then get these workers to act in concert with one another. If only one worker out of a hundred-person factory objects to working unpaid overtime, management could usually replace the dissenting worker. If this worker is a member of a union, then management could face union retaliation for such an action. If 75 of the 100 workers are union members, the union could stage a walkout in protest of the unfair firing. This would effectively stop production, something too expensive for management to ignore.

Unions have the ability to **bargain collectively** about contracts, negotiating with management on behalf of all its members. If management refuses to reach an agreement, the union members can strike, refusing to work until their demands are met. Overall, unions help their members set wages. Union jobs often have a higher wage and better benefits than similar non-union jobs. Yet these improvements are not without their costs. Union jobs increase labor costs, leading to higher prices to offset the higher costs of production. Companies dominated by union members are often burdened with these high costs to such an extent that they lose the ability to compete in an industry. This is especially true if their competitors have lower labor costs due to no union presence. So, while unions improve wages and workers' benefits, they also raise the cost of labor and reduce a company's ability to compete.

★ *Current Labor Issues* ★

The previous standard covers the historical role of unions in the United States, while this standard covers the issues involving labor today. Over the past fifty years, union membership has declined dramatically in the United States. Roughly one person out of three was a union member in 1955, while that number is now just one in seven. Almost half of all union workers currently are government employees. There are many reasons for this change, including:

1. A shift from manufacturing to service jobs. Manufacturing jobs have traditionally been more union-friendly than service jobs. As the service sector of the United States economy grows, the union-heavy manufacturing side decreases.

2. Increased global competition. With world markets merging, it is difficult for a company carrying high labor costs to remain competitive. Foreign companies who do not pay their workers as much continually undersell companies with these high production costs.

3. A more mobile workforce. Many people do not go to work for a company and expect to be working there for the rest of their careers. This might have once been the case, but it is not as prevalent anymore. Workers who move from one job to another and one sector to another are not as interested in joining a union.

4. Better perks. Today, companies have begun to offer employees many benefits just to attract them to work. These benefits include flextime, vested stock options, and free mobile phones and computers. These workers do not need a union to bargain for them because companies are competing for their skills.

While unions are in decline, this does not mean they are gone for good. Overall, unions still provide their members with a higher standard of living than non-union members. They also provide the best means to check management policies that are harmful or detrimental to the workers of a company.

★ *Role of Regulatory Agencies* ★

While some government agencies are set up to regulate monopolies, other agencies exist to regulate numerous aspects of the United States economy. Some agencies work to ensure the safety of goods and services. For example, government inspectors check various meats and other foods for harmful bacteria. Other agencies exist to maintain competition in certain markets, such as the local radio market. Fearing the effects of having one company control all radio stations, the Federal Communication Commission (FCC) prevents any company from owning more than eight stations in the single market. (This number was once lower, but a 1996 law increased the number to eight.) Eight stations is a lot for one company to have, but it does allow for other companies to offer radio stations with different views and programming.

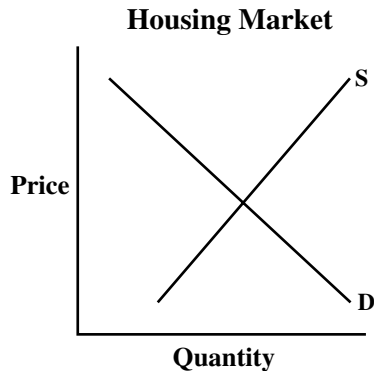
STRATEGY BOX — On Your Side

Government regulation takes many forms. Overall, the goal of the government is to provide for the health and safety of its citizens and its businesses. Some regulation protects citizens from corporate abuse. Other government regulations help businesses recover from external problems by offering money to help offset an unforeseen disaster.

Sample Questions for Content Domain III

This section has some sample questions for you to try. After you have answered all of the questions, check your answers in the “Answers to the Content Domain III Sample Questions” section that follows. This section will give you the correct answer to each question, and it will explain why the other answer choices are incorrect.

- 1 Use the information to answer the following question.**



When the income in households increases, what is the likely result?

- A The supply curve will shift to the left.
- B The supply curve will become vertical.
- C The demand curve will shift to the left.
- D The demand curve will shift to the right.

- 2 Use the information to answer the following question.**

Organizers of many high-interest sporting events such as the Super Bowl and the World Series usually set ticket prices lower than the equilibrium price, citing fairness to the public as their reason.

What names do economists give to the resulting set price and disequilibrium situation?

- A price ceiling; surplus
- B price ceiling; shortage
- C price floor; shortage
- D price floor; surplus

- 3 The Taft-Hartley Act of 1947 was generally viewed negatively by labor unions because it**

- A made it illegal to require workers to join unions before being hired
- B disbanded the American Federation of Labor
- C established right-to-work laws in all states
- D exempted many assembly line workers from the national minimum wage laws

- 4 Timothy works for many years at a highly successful computer corporation. After a while he decides to leave the company and open his own clothing store. To raise capital for the store, Timothy sells all the vested stock he acquired while working at the computer corporation. The clothing store can be considered**

- A an oligopoly
- B a partnership
- C a sole proprietorship
- D a corporation

- 5 Because of the invention of the Automatic Teller Machine (ATM), people have**

- A needed to hold less cash
- B gradually stopped using credit cards
- C reduced their consumption expenditures
- D increasingly gone into debt

Answers to the Content Domain III Sample Questions

1. Answer: **D** Standard: *Price determination*

Houses can be considered normal goods, since people tend to increase their consumption of housing (by buying a bigger house) as their income increases. In the short run, this increased demand will lead the demand curve to move to the right, so the answer is **D**.

2. Answer: **B** Standard: *Price determination*

Setting ticket prices below the equilibrium price creates a price *ceiling*. This eliminates choices **C** and **D**. Price ceilings create a shortage of a good, so **B** is the correct answer.

3. Answer: **A** Standard: *Current labor issues*

The Taft-Hartley Act was actually vetoed by President Truman, although Congress garnered enough votes to pass the legislation anyway. In general, the Act curtailed the power of unions. One way it did this was by outlawing the practice of requiring workers to join unions before being hired, or joining the union within a specified period of time. A closed shop gave unions the ability to perpetuate union control indefinitely. The Taft-Hartley Act declared this action illegal, so the answer is **A**.

4. Answer: **C** Standard: *Types of businesses*

The term oligopoly refers to a market structure, not a type of business. It is not the correct answer. There is no other person mentioned in the question stem, so the clothing store is not a partnership. Sole owners must raise their own capital for investment, which is why Timothy is selling stock. Although Timothy once worked at a corporation, he is going to be the sole owner of the clothing store. The answer is **C**.

5. Answer: **A** Standard: *Economic Exchange*

The ATM made it easier for people to access cash at many different locations. Therefore, the demand for cash declined because people were able to carry only as much cash needed in the immediate future. The ATM did not stop the use of credit cards or increase overall debt. Consumption did not change because the ATM did not increase or decrease people's overall income. Therefore, the correct answer is **A**.

Content Domain IV: Macroeconomics: The National Economy



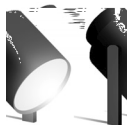
A LOOK AT CONTENT DOMAIN IV

Test questions in this content domain will measure your understanding of the national economy. Your answers to the questions will help show how well you can perform on the following standards:

- * Banking functions
- * Macroeconomics/Key economic indicators
- * Aggregate supply and demand
- * Types of unemployment
- * Business cycle/Economic cycle
- * Role of the Federal Reserve in monetary policy
- * Fiscal policy and the federal government

If you look through the pages of a business newspaper you will see two major types of articles. One set of articles discusses how individual firms are making profits, losing money, or making various economic decisions. These articles deal with microeconomic issues. The second set of articles takes a larger view of the economy and includes issues like overall economic growth, the unemployment rate, inflation, and government policies. These articles cover macroeconomic issues.

From Content Domain I you know that *macroeconomics* means “large economics,” and this is just what macroeconomics covers: large-scale economic issues. While a single company has employees, a nation has a national employment rate. While a single firm produces a set of goods or services, a nation has a Gross Domestic Product, which is the sum of *all* goods and services produced. As you can see from these two examples, microeconomics and macroeconomics are similar. Both are concerned with employment, goods and services, pricing, and other basic economic topics. The difference between microeconomics and macroeconomics is the scope of their analysis of economic behavior. While microeconomics covers single firms and their relation to particular markets, macroeconomics sums all these individual markets together in order to discuss the economic health of a nation.



Spotlight on the Standards

* **Banking Functions** *

For many people, banks are places to store money. These people keep money in checking and savings deposits, and they might even store valuable jewels, stocks, or important

documents in safety deposit boxes inside their bank's vault. If a person keeps enough money in his or her accounts, a bank might even offer these services free of charge.

This seems awfully generous of the bank, doesn't it? Before you start praising its generosity, keep in mind that a bank is really in business to make loans to people. Banks offer a variety of loans: mortgages, credit card debt loans, car loans, and personal loans. Banks also offer loans to businesses that want additional capital for investment. All of these loans have different interest rates, which means that when the borrower pays back the loan, they also pay an extra fee (a small percentage of the total loan) for being able to use the bank's money.

There's an old expression that says, "You have to *spend* money to make money." For banks, the expression would be, "You have to *loan* money to make money."

As you can see, the two main functions of a bank—holding people's money and making loans—are related. While banks are storing money deposited by their customers they can offer this money to borrowers in the form of loans. This is why banks often waive fees for people with large deposits. They want that cash! To be more precise, large deposits increase the amount that banks are able to loan, and in the banking world, more loans equal more profits.

The process described above sounds simple, but the real banking world is not quite so easy. First, banks only make money if the loans are repaid. If loans aren't repaid, then banks are in trouble, especially when depositors show up to retrieve the money in their accounts. This is why banks are careful to insure that loans will be repaid. A borrower often has to have collateral to receive a loan. **Collateral** is often property (like a house or farm) that the bank will receive if the monetary loan is not repaid.

Second, banks increase deposits by offering interest rates on some accounts, like savings accounts. The interest rate creates an incentive for people to place money in the bank, but it also cuts into bank profits. Of course, the interest rate offered on accounts is less than the rate at which banks loan out the money. If it weren't, the bank would never be able to make a profit.

Finally, the more money a bank lends out, the greater its profits will be. However, depositors have a right to enter a bank and demand the money in their accounts. For this reason, the federal government requires banks to keep a percentage of total deposits (called the *reserve requirement*) on hand at all times. This amount wouldn't be enough if everybody showed up and demanded his or her money, but this rarely happens. The current reserve requirement is 10 percent of the value of all checking and savings accounts.

* **Macroeconomics/Key Economic Indicators** *

When you go for a checkup, the doctor looks at several indicators—heart rate, blood pressure, and body temperature—to help determine your basic level of health. The general economic health of a nation can also be judged by looking at several basic

economic indicators, which include the Gross Domestic Product (GDP), the Consumer Price Index (CPI), and the unemployment rate. A quick glance at these three factors can often tell you how an economy is doing.

As stated earlier, the GDP is the market value of all goods and services produced by a country over a specific period of time, usually a year. There are different methods of measuring GDP, but the most common one is known as the expenditures approach. This approach adds up all the money spent by a country's consumers, firms, and the government, and then factors in net exports. The formula for GDP can then be written as:

$$\text{Gross Domestic Product} = \text{Consumer Expenditures} + \text{Business Investment} + \text{Government Expenditures} + \text{Net Exports}$$

$$\text{GDP} = C + I + G + X_n$$

The Net Exports part (X_n) is needed to take into account the amount of money foreigners spend on our goods and services as well as the amount we spend on foreign goods and services. Foreigners buying our goods should be part of GDP, while money we spend on *foreign* goods is not part of the Gross Domestic Product.

$$\text{Net Exports} = (\text{American goods and services bought by foreigners}) - (\text{foreign goods and services bought by Americans})$$

$$\text{Net Exports} = \text{exports} - \text{imports}$$

Tracking GDP over a period of years can tell you if a nation's economy is expanding or contracting. If GDP rises by 4% from Year 1 to Year 2, then the economy appears to be doing well. However, inflation can distort GDP growth, since a rise in the average price level would increase GDP. If inflation between Year 1 and Year 2 was very high, then GDP might not have grown at all. The higher prices caused by inflation may have caused the 4% shift, but the economy was actually unchanged.

For this reason, GDP is often discussed as real GDP. A base year is used, and a **price index** (called the GDP deflator) is used to measure all future GDP in terms of the base year prices. Ideally, using base year prices will eliminate any distortions caused by price changes and allow real GDP to accurately reflect changes in the nation's economy.

The GDP deflator is a price index that is designed to track inflation (and deflation). The Consumer Price Index does the same thing. The CPI takes a hypothetical basket of goods and services purchased by a typical household. It then tracks changes in the amount of money required to purchase this same basket of goods and services year after year. For a simplified example, suppose a household's basket of goods consisted of milk, paperback books, and plastic sofas.

Quantity on Year 1	Year 1 Price	Cost
300 gallons milk	\$1.20	\$360
50 paperback books	\$5	\$250
2 plastic sofas	\$110	\$220
Total cost of Basket in Base Year		\$830

Quantity on Year 2	Year 2 Price	Cost
300 gallons milk	\$1.80	\$540
50 paperback books	\$5.50	\$275
2 plastic sofas	\$100	\$200
Total cost of Basket in Year 2		\$1015

Note that the quantity of each good purchased does not change from year to year. This is true when creating a CPI. This is not exactly true in the real world since consumers might substitute another good for a good whose price increased too much. For this reason CPI sometimes overstates the increase in price levels.

Consider prices in the base year to have a standard value (known as an *index*) of 100. To find the increase in price in year 2, you must divide the Year 2 basket cost by the base year basket cost, and then multiply by 100 to find the index.

$$\text{CPI} = (\text{Year 2 basket cost} / \text{base year basket cost}) \times 100$$

$$\text{CPI} = (1015 / 830) \times 100$$

$$\text{CPI} = (1.22)(100)$$

$$\text{CPI} = 122$$

Compared to a base year price of 100, prices in Year 2 were 122, or 22% higher. That's a great deal of inflation. You can see that the change is mostly attributable to the high increase in the cost of milk, whose price increased by 50%. A question for this standard may look something like this:

Between Years 1 and 5, a nation's nominal GDP remained the same.

The CPI for year 5 was 93, falling from 100 in Year 1. Based on this, a reader could most likely conclude that between years 1 and 5

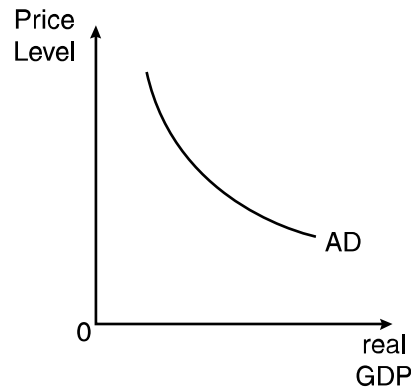
- A real GDP increased and deflation occurred
- B real GDP increased and inflation occurred
- C real GDP decreased and deflation occurred
- D real GDP decreased and inflation occurred

A drop in the CPI to 93 shows that the same bundle of goods that cost 100 units in Year 1 now only costs 93 units. This deflation means consumers had added spending power, since a dollar earned in Year 5 had more purchasing power than a Year 1 dollar. Therefore, Real GDP actually increased during the period, although the fall in average prices masked this increase in nominal GDP. The answer is A.

The third major economic indicator—the unemployment rate—will be covered in greater detail starting on page 54.

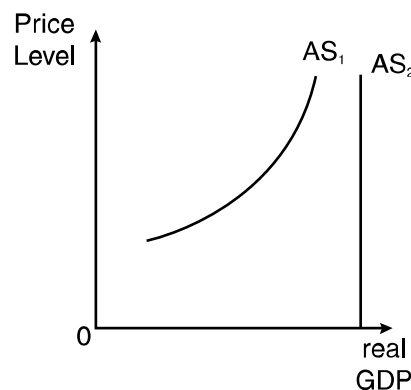
*** Aggregate Supply and Demand ***

Aggregate supply and demand is a macroeconomic idea that parallels supply and demand in microeconomics. Demand for *all* goods and services within a nation combines to form **aggregate demand**, while the supply of *all* goods and services within a country is its **aggregate supply**. An aggregate demand curve is shown below.



The aggregate demand curve looks like a demand curve for a single business, but note that the horizontal and vertical axes are labeled differently. The vertical axis is a price level, like the CPI or GDP adjusters, while the horizontal axis represents real GDP. The downward-sloping curve of aggregate demand is similar to an individual demand curve except that it is caused by the relative wealth of a country rather than an individual. Assuming the money supply is constant, a lower price level will give people greater purchasing power. (You saw this demonstrated in the last question.) This is shown by a movement to the right along the aggregate demand curve and is accompanied by an increase in real GDP. Net exports also play a part in the aggregate demand slope. As domestic price levels increase, foreign-made goods become more attractive, since domestic goods are becoming relatively more expensive. A decrease in exports and an increase in imports will affect X_n in the GDP equation, causing GDP to fall.

Aggregate supply curves are generally upward sloping but, like most supply curves, they can be vertical depending on what assumption you use to construct the curve.



The difference between AS_1 and AS_2 involves the amount of time needed to adjust prices based on changing economic conditions. Assume for now that a nation's output or GDP varies slightly over short periods of time, but over many years remains generally constant. AS_2 , known as the **long-run aggregate supply** curve, shows that no matter what the price level is, real GDP remains constant. This is simply to represent the assumption that an economy's output remains about the same over long spans of time. AS_1 , on the other hand, is called a **short-run aggregate supply** curve because it represents the relationship between prices and GDP over short spans of time. It slopes upward because the economy is temporarily able to increase or decrease output in response to price changes. Because economists want to examine aggregate supply in both the short-run and the long-run, both of these curves are useful.

STRATEGY BOX — Aggregate Supply and Demand

Shifts in aggregate demand and supply can signal changes in the economy. If the aggregate demand curve shifts to the left, then real GDP is falling. This could mean a recession. If aggregate supply shifts to the right, then the economy is producing more goods and services at the same price level. This could signal improvement in production ability brought about by technological and capital improvement.

* *Types of Unemployment* *

Just because you're not working, it doesn't mean you are unemployed. Two-day-old babies at a hospital are not considered unemployed, even though they aren't working. Ninety-three-year old retirees aren't unemployed. College students are not considered unemployed. If a student holds down a part-time job, however, they might be considered employed, since the unemployment rate counts part-time and fulltime employment as being employed. It is perhaps simplest to define unemployment in the following way:

If you're looking for a job, and can't find one, then you're unemployed.

People who have given up looking for employment are called **discouraged workers**. Even though these workers could eventually find work, the fact that they are not looking for it means that they are not included as part of the unemployment rate.

Generally speaking, nations want to keep their unemployment rates low. Unemployed people are often unhappy, not to mention out of money and unable to contribute to the economic well being of the nation. High rates of unemployment have a negative effect on a society. Nations can offer unemployment benefits to help people while they are unemployed, but nothing beats a steady job and economic wealth to help a society and its members.

As you may have guessed, not all unemployment is the same. The following table shows the four major types of unemployment.

Forms of Unemployment

1. **Structural.** Structural unemployment occurs when you have job skills that no one wants, or when a company wants to hire somebody but can't find anyone who has the necessary requirements. Suppose you worked at a company that made old-fashioned phones with dials. Almost no one wants these phones anymore, so once your company closes, there is no place for you to use your old-fashioned phone-making skills. At the same time, suppose that a local company needs people who can design computer networks, but no one in the community has experience in this area. This type of mismatch is a typical example of structural unemployment.

Learning new skills or moving to a different location can reduce this type of unemployment. For instance, another nation might need old-fashioned dial phones, so you could move there and have a much better chance of finding a job that matches your skills. Or you could stay where you are and take some computer networking classes. This might give you the training needed to apply for a job as a computer-networking technician. In any case, this is considered the most serious type of unemployment because it is usually the most difficult to address. After all, moving somewhere else might not be very easy (especially if you don't have the money to pay for the move) and training for a new job is costly and often takes a long time.

2. **Frictional.** Unemployed people don't always take the very first job they can find. They often wait in order to find a job that fits their talents and preferences. While they search for a job that is a good fit, these people are frictionally unemployed. Overall, frictional unemployment is not entirely bad for an economy because it gives people time to find a job that suits their needs.
3. **Seasonal.** If you are a professional snow remover in New York, you know what seasonal unemployment is. Certain jobs have peak periods and periods where there is little work. A professional snow remover in New York would be seasonally unemployed for much of the year, only finding work when it snows. (It would be a good idea to learn a skill that would be useful during the warm months of the year.)
4. **Cyclical.** Most economies encounter cyclical periods of growth and recession. During boom years, unemployment drops dramatically as companies hire new workers to match the higher demand. However, boom periods often overreach, and these are followed by recessions. People who are laid off as a result of a contracting economy are cyclically unemployed.

You might find a question like this on the EOCT:

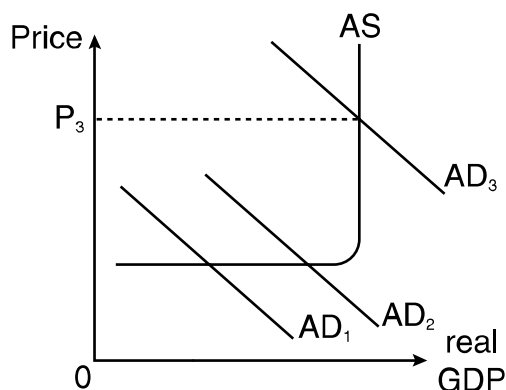
Suppose that Peggy, a recent college graduate, decides to look for a job instead of going to graduate school. If she is unable to find a job that suits her interests right away, what type of unemployment is she MOST LIKELY experiencing?

- A structural
- B seasonal
- C frictional
- D cyclical

While Peggy may be experiencing cyclical unemployment because of a downturn in the economy, the question notes that she is trying to match her skills with a job that she wants. Therefore she is experiencing frictional unemployment.

* **Business Cycles/Economic Cycles** *

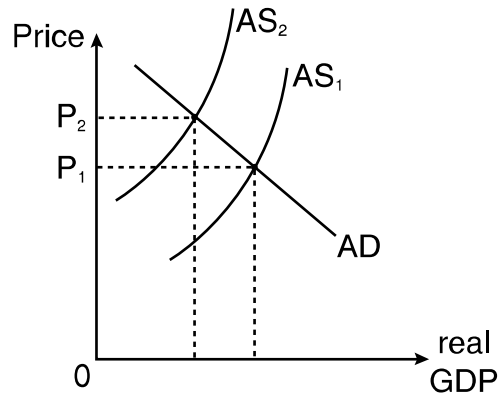
Cyclical unemployment occurs during a recession, the low part of the business cycle. While not all of the reasons for these business cycles can be discussed here, you can learn about how **inflation** (a rise in the price level) can affect the economy throughout these expansions and contractions.



Suppose that the economy is in a recession and unemployment is high. However, things start to pick up, and aggregate demand moves from AD_1 to AD_2 . Along this section of the aggregate supply curve, real GDP grows and prices don't. This reflects the fact that growth is occurring mainly by eliminating cyclical unemployment. During the recession, the nation was not working at full capacity, so it had room to grow without spurring prices.

The situation changes from AD_2 to AD_3 . At AD_2 , the economy was already close to its highest aggregate supply ability. However, the continued increase in demand “pulls” the price level to P_3 , even though it does little to increase real GDP. This is known as **demand-pull inflation**. Prices have increased, but real GDP has not changed.

Inflation can also occur in other ways. Suppose an economy is at AD in the graph below. Now suppose that a series of tornadoes and hurricanes devastate numerous sectors of this economy. This would cause aggregate supply to fall, as ruined businesses are busy rebuilding. In this event, the nation's aggregate supply falls from AS_1 to AS_2 . As you can see, prices rise and real GDP falls. This event is called **cost-push inflation**.



A little inflation is not very harmful to an economy. Consumers with large loans actually benefit during periods of inflation, since this reduces the relative cost of the loan (banks, on the other hand, would suffer for the same reason). So long as a person's wage increases proportionally to the inflation, then the consumer will be no better or worse off. However, wages are often fixed by a contract, so a person with a fixed wage might not be able to consume as much as inflation continues, since his or her relative spending power is reduced. Some contracts take this into consideration by having a **cost-of-living adjustment**, which shifts a person's wage up to reflect increases in the price level.

If inflation is expected, consumers can plan for a slight increase in price and make decisions accordingly. Trouble occurs when inflation rises too sharply. This reduces the value of saved money, causing people to spend all the cash they can before it devalues. In the rush to spend their money, people often become less productive, reducing a nation's aggregate supply. This, of course, can lead to more inflation. Inflation that spirals out-of-control can seriously damage an economy, which is why governments often take steps to prevent this occurrence. In the United States, the government works to control inflation through the Federal Reserve System.

* Role of the Federal Reserve in Monetary Policy *

In 1913, Congress created the Federal Reserve System to act as the nation's central bank. By creating this "lender of last resort," Congress hoped to insure people that the money they placed into U.S. banks would not disappear due to shoddy business practices.

Currently, the Federal Reserve System consists of twelve different banks located throughout the United States. Each bank covers a different district and prints its own currency. You can see which bank printed a particular one-dollar bill by looking to the left of Washington's portrait.

The Federal Reserve System (also called the *Fed*) influences monetary policy for two main reasons. It wishes to control inflation (for reasons you have just seen), and it attempts to curb recessions. The Fed achieves these goals by buying and selling government securities in the open market. Imagine that these securities are pieces of paper promising that the government will eventually repay the amount of the security (plus interest). So, if the government wants to reduce the money supply, it can simply sell these securities, essentially trading cash for secure promises. By buying and selling these securities, called **open-market operations**, the government can immediately affect the money supply and eventually change the interest rate.

For example, suppose the Fed believes that a rapidly growing economy will cause demand-pull inflation. To deter inflation, the Fed will sell securities at prices low enough to guarantee someone will buy it. This influx of securities causes bond prices to fall and interest rates to rise. Higher interest rates discourage business investment and consumer spending, which reduces real GDP, which slows economic growth and curbs inflation.

If the Federal Reserve wanted to stimulate the economy to reduce unemployment, it could *buy* securities on the open market. This would have the opposite effect as the scenario described above.

The Federal Reserve could also manipulate the **discount rate**, which is the interest rate that the Fed charges on loans it makes to banks. (The Fed is like a banker's bank in many ways.) Altering this rate affects whether or not banks take loans from the Federal Reserve Bank. For example, a low discount rate encourages banks to borrow money, leading to more loans, which ultimately means more money in the economy.

Finally, the Federal Reserve can influence the money supply by changing the reserve requirement. From the first standard, you know that a lower reserve requirement means banks can loan out more money.

Here is what a question for this standard might look like:

Suppose the Federal Reserve wants to reduce the nation's money supply. The Fed could accomplish this by doing all of the following EXCEPT

- A** decrease the discount rate
- B** increase the reserve requirement
- C** sell securities on the open market
- D** make banks hold a reserve for all types of deposits

Decreasing the discount rate will encourage banks to borrow money from the Federal Reserve and make loans. This will increase the money supply, so A is the correct answer. All other choices reduce the nation's money supply.

*** Fiscal Policy and the Federal Government ***

The federal government can affect the national economy through taxes, expenditures, and borrowing. To see how each of these factors can change GDP, recall the earlier formula

$$\text{GDP} = C + I + G + X_n$$

The first element, taxes, can affect both consumers (C) and business investment (I). Consumers make up more of GDP than business investment, however, so consumer taxes have a greater influence on GDP than taxes relating to business investment.

To boost GDP, the government can reduce taxes. This would encourage most consumers to purchase more because the government is taking a smaller portion of their income. When consumers spend more, producers increase their output and the GDP increases.

Another way to increase GDP would be to increase government spending, G. However, consider what would happen if tax cuts and government spending were to occur at the same time. The new tax deduction would reduce government revenue while the government was simultaneously increasing its spending. This could lead to a budget deficit, where the government spends more than it collects. Over time, the government would have to borrow money in order to make up this deficit. This might not seem like a big deal, but continued budget deficits will lead to increased interest payments on that national debt. To get more money, the government might have to raise taxes that don't provide any service other than paying the interest on the national debt.

Sample Questions for Content Domain IV

This section has some sample questions for you to try. After you have answered all of the questions, check your answers in the “Answers to the Content Domain IV Sample Questions” section that follows. This section will give you the correct answer to each question, and it will explain why the other answer choices are incorrect.

- 1 What problem might policymakers be trying to address MOST if they increase funding for training programs covering skills such as computer repair, programming, and networking?**

A frictional unemployment
B structural unemployment
C cyclical unemployment
D seasonal unemployment

- 2 A market basket of consumer goods purchased in 2000 cost \$172. What would that same market basket have cost in the base year?**

A \$72
B \$100
C \$136
D \$152

- | | |
|--|---|
| <p>3 Government officials adopt an expansionary fiscal policy. Which action would be consistent with this policy?</p> <ul style="list-style-type: none">A raising the discount rateB buying government bondsC increasing government spendingD raising personal income tax rates <p>4 Over a two-year period, the nation of Parthia experiences a steep decline in the unemployment rate, a rise in real GDP, and a stabilized price level. Parthia appears to be</p> <ul style="list-style-type: none">A at the start of a recessionB at the beginning of a recessionC stagnating economicallyD in the middle of a boom period | <p>5 If the unemployment rate is rising and the GDP is falling, the fiscal policy that the federal government should MOST likely follow is</p> <ul style="list-style-type: none">A decreasing taxesB decreasing spendingC decreasing the money supplyD decreasing the reserve requirement |
|--|---|

Answers to the Content Domain IV Sample Questions

1. Answer: **B** Standard: *Types of unemployment*

The policymakers are attempting to address the question of matching employee skills to available jobs. This is a direct reference to structural employment.

2. Answer: **B** Standard: *Macroeconomics/Key economic indicators*

Base year prices always begin at \$100. This round number allows changes up or down to be easily discernible. The answer is **B**.

3. Answer: **C** Standard: *Role of the Federal Reserve in monetary policy*

Fiscal policy differs from monetary policy. Fiscal policy centers around the federal budget, while monetary policy seeks to influence the nation's money supply. Choice **C**, increasing government spending, would expand the government's budget, so it is an expansionary fiscal policy. Choice **B** would expand the nation's money supply, so it falls under the category of monetary policy.

4. Answer: **D** Standard: *Business cycles/Economic cycles*

All three economic indicators are positive. Unemployment is down, the economy is growing, yet price levels have not moved. These good times translate to a boom, choice **D**.

5. Answer: **A** Standard: *Fiscal policy and the federal government*

Both **C** and **D** are monetary policies, so neither of these options is correct. Fiscal policy is a tool that the government uses to regulate the speed of the economy. When the unemployment rate is rising and the GDP is falling the government should speed up the economy. Decreasing taxes, choice **A**, would be one possible way to achieve that goal. Decreasing spending, on the other hand, would slow down the already sluggish economy.

Content Domain V: The International Economy

A LOOK AT CONTENT DOMAIN V

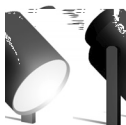


Test questions in this content domain will measure your understanding of the international economy. Your answers to the questions will help show how well you can perform on the following standards:

- ✿ Types of economic systems
- ✿ International trade
- ✿ International trade issues

You can think of Content Domain V as being “macro-macroeconomics.” While microeconomics covers the interaction of a single market and macroeconomics views the larger national picture, Content Domain V views an even larger picture: how the various national economies interact to form a world economy.

The growth of massive multinational corporations is one sign that the world’s economy is becoming more interconnected each year. Take a trip to a local grocery store to see this phenomenon. You should find fruit and vegetables from Australia, Asia, and South America sitting next to peaches and tomatoes that may have been grown mere miles away from your home. As national economies become more interconnected, international economic issues like trade agreements and trade barriers become more important. Content Domain V covers some of the key topics involving the world economy today.



Spotlight on the Standards

✿ *Types of Economic Systems* ✿

In Content Domain III, you learned about market structures like monopoly and perfect competition. Although a pure monopoly rarely appears in the real world, learning about its structure allowed you to see the monopolistic elements in real markets. You can also do this with the three types of economic systems described on the next page. While none of these systems exist in a pure form in the real world, most national economies can be described using a mixture of these terms. Learning what each system represents will give you the ability to recognize elements of different systems in various national economies.

Three Major Economic Systems

1. **Market.** This is also called a capitalistic or free-market system. In a market system, private individuals and firms control all resources and the price and quantity of all goods are determined by the interaction of demand and supply in unrestricted, open markets. Ownership of property and goods is determined in the private sector and the government does nothing to interfere with any market. Instead, this system relies on the belief that a market system naturally leads to efficient results (called the “invisible hand”), which theoretically correct any inequalities in resource allocation.

Adam Smith used the phrase “invisible hand” in his 1776 book entitled *Wealth of Nations*. Even though his book is as old as the United States, the theories he proposes are still relevant in today’s economy.

The United States is very market-oriented, but it is not a purely capitalistic system. One problem with market economies is that the accumulation of wealth can be uneven. Under this system some people might become very rich while others might remain poor. In the United States the government intervenes in the economy so that there is a mechanism to take care of the poor. Poverty, however, is not the only problem that may emerge if the government is completely uninvolved in markets. Other problems with unregulated activities include the elimination of competition (as monopolies would be free to exist and expand), inefficient public services, and outright theft.

2. **Command.** A command economy is the opposite of a market economy. In this case the government commands all markets, determining what to produce, how to produce, and for whom to produce. Centralized planning committees take into account all the resources a nation has to offer (people, land, capital), and then set up an economic system to produce this predetermined mixture of goods and services.

Since the government is in charge of everything, citizens should all receive equal amounts of basic goods and services. In theory, this means that there should be no problems with high unemployment or poverty. In a command economy, the government is supposed to provide for its citizens.

A command economy may work in a simple society with only a small number of people. Yet today’s economies are often too complex for a committee to decipher. For this reason, command economies often produce a set of goods and services that is different from what its population really wants, leading to shortages of needed goods and surpluses of others. Also, since there is no private ownership, people have little incentive to work hard. Because the government manages all basic economic decisions in a command economy, personal liberties and freedom are not as great as they are in a market economy.

The former USSR was an example of a command-dominated economy. The fact that this country collapsed economically has led many economists to question the long-term viability of command economies.

- 3. Traditional.** A traditional economy maintains a status quo, deciding that if something worked for one generation, it can work for the next as well. The static nature of a traditional economy can allow it to continue for long periods, but its inability to change can also stifle progress and economic growth. The global economy has rapidly changed over the past hundred years and this has left many traditional economies far behind.

While these three systems describe theoretical concepts of how an economy might function, in the real world most economies blend two (or even all three) of these systems. For instance, while China is considered a command economy, they have rapidly begun to incorporate many aspects of a market structure into their economy. Likewise, while the United States is considered to have one of the most capitalistic economies in the world, the government still intervenes in some markets. Therefore, there is a fourth economic system known as a **Mixed** economy. This is simply a way of naming an economy that incorporates aspects from different economic systems.

A question for this standard might look like this:

The nation of Welton needs to build a new dam to control flooding near its largest city. If Welton is a purely market economy, then these new improvements will MOST likely be left up to

- A** the government
- B** the individuals who are willing to pay for the new dam
- C** anyone who would benefit from the dam
- D** the owners of the property on which the dam would be built

This question highlights a problem with a purely market-based system, namely that public goods (like roads, bridges, and dams) are difficult to build without a government that sees to their production. C is not the correct answer because once a dam is built everyone benefits from it. While D might seem like a correct answer, if a property owner does not want the dam to be built he or she is under no obligation to build it. Ultimately, in a pure market economy individuals must be willing to pay for public goods (answer choice B), no matter who would benefit from the final product.

International Trade

International trade allows a country to concentrate on what it does best and trade for what it can't or doesn't produce. In effect, trade allows a country to specialize in certain goods, which (as you know from earlier sections) leads to more efficient production. An example of this can be found by considering the relationship between Brazil's sugar industry and the United States' auto-making industry. The climate and environment of

Brazil makes growing sugar cane relatively easy. It would be much harder to grow sugar cane in Detroit, for example, which would require large greenhouses, huge sunlamps, and a labor force skilled in the growth of this tropical plant. It is much easier for Detroit (and by extension the United States) to specialize in manufacturing automobiles and then trade for sugar from Brazil. In fact, when each country specializes in what it does best, each country has more to trade. In other words, as both countries take advantages of their strengths, both countries increase their overall economic well-being.

The terms economists use to describe a country's economic strengths in relation to another country are *absolute advantage* and *comparative advantage*.

When a country has an **absolute advantage** over another country it simply means that that country can produce more of a good than another country. For example, Brazil has an absolute advantage over the United States in the production of sugar, while the United States has an absolute advantage over Brazil in the production of cars.

While large countries will probably have an absolute advantage in production over smaller countries, when any two countries are producing two goods, like cars and sugar, one country will **always** have a **comparative advantage** over the other in the production of one of the two goods. Put another way, given two countries that can both produce sugar and cars, one country should specialize in producing cars and one country should specialize in producing sugar so that they can trade.

At first this might seem silly. After all, what if a country is better at producing both sugar and cars? Imagine that the United States isn't trading sugar and cars with a country as large as Brazil. Instead, suppose that United States is trading with a very small country like Costa Rica. Unlike Brazil, Costa Rica cannot produce as much sugar as the United States, nor can it produce as many cars as the United States. In fact, the United States has an absolute advantage over Costa Rica in the production of both cars *and* sugar. Does this mean that they cannot benefit from trade? The answer is no. They can still benefit from trading with one another because each country has a comparative advantage over the other. In essence, this means that one country is more efficient at producing a good than the other. While Costa Rica might not be able to produce as much sugar as the United States, it does not cost it very much to produce the small amount that it can grow. After all, Costa Rica doesn't need greenhouses and expensive equipment to grow sugar cane. So, while the United States could produce more sugar than Costa Rica, it should put more effort into producing cars because it costs so much to produce sugar in the United States. If Costa Rica and the United States trade, the United States should produce cars (because it has a comparative advantage in the production of cars) and Costa Rica should produce sugar (because it has a comparative advantage in the production of sugar). While the United States could produce more of both, it is more efficient to specialize in the production of cars and trade those extra cars for sugar.

International trade can also help reduce the incidence of wars between nations. When the economic fortunes of two countries become linked, these countries are less likely to go to war with each other over disagreements. This is due to the fact that each nation knows a war will damage their economy as well as the economy of their opponent.

The example on the previous page illustrates the benefits of international trade. In economic terms, there are clear advantages to both countries. Sometimes, however, policy makers make decisions that are not always based on economic principles. For instance, sometimes a nation's leader might feel that a particular industry is important for national security. Because a war might disrupt trade, a country that is dependent on others for certain goods might be left unprepared. Therefore, a country might try to encourage certain industries to remain functional, even though it might be more efficient to trade for that particular good rather than produce it. This is known as *protectionism* because it protects a country's industries from foreign competition.

If a nation engages in protectionist policies, it usually does so by finding ways to reduce the amount of a foreign good that enter the country. A **tariff** is a tax on an imported good. This increases the price of that good, thereby decreasing the quantity demanded. A tariff might help a domestic producer stay in business, even though an imported good would (without the tax) be cheaper for domestic consumers. A **quota** functions in a similar way but instead of taxing the import, a quota limits the amount of a good that is allowed into the country. That way, while a foreign good may be cheaper, domestic consumers can only buy so much of it before they have to buy comparable domestic goods instead.

In general, both tariffs and quotas are put in place in order to make it easier for domestic producers to compete against foreign firms who want to sell their products in the United States. International trade is, nevertheless, beneficial to an economy. While protectionism might allow some domestic firms to keep producing, allowing free trade is almost always the most efficient way to run an economy.

✿ **International Trade Issues** ✿

Tariffs, quotas, and other trade agreements are international trade issues that entire countries must address. For individuals, the exchange rate is one of the most important international trade issues. The **exchange rate** measures the price of one nation's currency in terms of another nation's currency.

Consider the case of two grocery stores: Americo-store and Groceria Mexicana. Americo-store is in Brownsville, Texas, while Groceria Mexicana is right across the border in Matamoros, Mexico. Suppose that the exchange rate between the U.S. dollar and the Mexican peso is 1:10, meaning one U.S. dollar translates to 10 Mexican pesos.

Exchange rates move up and down to reflect the worth of one country's currency in comparison to another. If there is a great demand for U.S. products, people need more U.S. dollars to purchase these goods. This drives the demand for U.S. dollars up, causing the dollar to **appreciate**, or strengthen. At the same time, the peso has **depreciated**, or weakened, relative to the dollar. This means that the new exchange rate is, say, 1:15, meaning an American dollar now translates to 15 Mexican pesos.

Here's the big question: Which grocery store benefits from the new exchange rate?

If you answered Groceria Mexicana, you would be correct. The appreciated dollar makes U.S. goods more expensive relative to their Mexican counterparts. The dollar can purchase more, but it also raises the price of U.S. goods. Some U.S. customers might take advantage of the strong dollar and cross the border to shop at Groceria Mexicana, since their dollars are worth 15 pesos instead of 10. Similarly, anyone converting pesos to dollars needs to pay 15 pesos for one dollar, rather than 10. In this case, when a person is converting dollars to pesos, his or her purchasing power has increased due to the new exchange rate. When a person is converting pesos to dollars, however, the stronger dollar lowers their purchasing power. Overall, business at Groceria Mexicana would increase, while Americo-store's business will decline as some customers cross the border to take advantage of their strengthened currency.

A question for this standard might look like this:

Over the course of one year, the Japanese yen depreciates relative to the euro. Which group of people would benefit the MOST from this occurrence?

- A European consumers of European goods
- B European consumers of Japanese goods
- C Japanese consumers of Japanese goods
- D Japanese consumers of European goods

The yen has depreciated, meaning that one euro now purchases more yen than it did previously. This would help European consumers of Japanese goods, since they now have additional purchasing power in Japanese markets due to the stronger euro. The answer is B.

Sample Questions for Content Domain V

This section has some sample questions for you to try. After you have answered all of the questions, check your answers in the “Answers to the Content Domain V Sample Questions” section that follows. This section will give you the correct answer to each question, and it will explain why the other answer choices are incorrect.

1 A tariff placed on foreign steel imports represents

- A a barrier to trade
- B a balance of payment deficit
- C a subsidy to domestic producers
- D an increase in domestic production

2 Those in favor of protectionist trade policies would MOST likely

- A support a reduction in tariffs
- B call for fewer import restrictions
- C cite the need to preserve domestic industries
- D believe that restrictions harm consumers

3 In the U.S. economy, the GDP can be calculated by adding together spending on consumption goods, investment goods, government goods, and net exports. In the past 25 years, what has been the only component to have consistently negative numbers?

- A net exports
- B consumption goods
- C investment goods
- D government goods

4 Milo farms the same small plot of land his ancestors farmed. He exchanges wheat for products he needs from local producers. The exchange value of the wheat changes little since the trade is governed by custom. What kind of operating system is Milo operating in?

- A command
- B traditional
- C market
- D capitalist

Answers to the Content Domain V Sample Questions

1. Answer: **A** Standard: *International trade*

Tariffs are taxes on imports. They often have the effect of helping domestic industries, so they *might* boost domestic production. First and foremost, though, they are a barrier to trade, since the added tax makes trading with that country unprofitable. The answer is **A**.

2. Answer: **C** Standard: *International trade*

Tariffs can help protect domestic industries by discouraging trade with other nations. Domestic workers who could be unemployed by lower costing imports are now able to retain employment, and “infant” industries are protected. Choice **C** is the answer. However, the domestic consumers will face higher prices because of the tariff, and the tariff would also patch over the fact that their domestic business is unable to compete in a world market.

3. Answer: **A** Standard: *International trade issues*

The wealth of U.S. citizens has allowed American consumers to purchase televisions from Japan, luxury cars from Germany, and bottled water from France. This massive amount of imports have led to consistently negative net exports numbers, choice **A**.

4. Answer: **B** Standard: *Types of economic systems*

Milo continues to operate his farm and conduct his transactions in the same manner as his ancestors. This adherence to tradition should lead you to choice **B** as the correct answer.

Appendix A

EOCT Sample Overall Study Plan Sheet

Here is a sample of what an OVERALL study plan might look like. You can use the Blank Overall Study Sheet in Appendix B or create your own.

Materials/Resources I May Need When I Study:

(You can look back at page 2 for ideas.)

1. *This study guide*
2. *Pens*
3. *Highlighter*
4. *Notebook*
5. *Dictionary*
6. *Economics textbook*

Possible Study Locations:

- First Choice: *The library*
- Second Choice: *My room*
- Third Choice: *My mom's office*

Overall Study Goals:

1. *Read and work through the entire study guide*
2. *Answer the sample questions and study the answers*
3. *Do additional reading in an economics textbook*

Number of Weeks I Will Study: *6 weeks*

Number of Days a Week I Will Study: *5 days a week*

Best Study Times for Me:

- Week Days: *7:00 p.m. – 9:00 p.m.*
- Saturday: *9:00 a.m. – 11:00 a.m.*
- Sunday: *2:00 p.m. – 4:00 p.m.*

Appendix B**Blank Overall Study Plan Sheet****Materials/Resources I May Need When I Study:**

(You can look back at page 2 for ideas.)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Possible Study Locations:

- First Choice: _____
- Second Choice _____
- Third Choice _____

Overall Study Goals:

1. _____
2. _____
3. _____
4. _____
5. _____

Number of Weeks I Will Study: _____**Number of Days a Week I Will Study:** _____**Best Study Times for Me:** _____

- Week Days: _____
- Saturday: _____
- Sunday: _____

Appendix C

EOCT Sample Daily Study Plan Sheet

Here is a sample of what a DAILY study plan might look like. You can use the Blank Daily Study Plan Sheet in Appendix D or create your own.

Materials I May Need Today:

1. *Study Guide*
2. *Pen*
3. *Notebook*

Today's Study Location: *the desk in my room*

Study Time Today: *From 7:00 p.m. to 8:00 p.m. with a short break at 7:30 p.m.*

(Be sure to consider how long you can actively study in one sitting. Can you sit for 20 minutes? 30 minutes? An hour? If you say you will study for three hours, but get restless after 40 minutes, anything beyond 40 minutes may not be productive—you will most likely fidget and daydream your time away. “Doing time” at your desk doesn’t count for real studying.)

If I start to get tired or lose focus today, I will *do some sit-ups.*

Today's Study Goals and Accomplishments: (Be specific. Include things like number of pages, sections, or standards. The more specific you are, the better able you will be to tell if you reached your goals. Keep it REALISTIC. You will retain more if you study small “chunks” or blocks of material at a time.)

<i>Study Task</i>	<i>Completed</i>	<i>Needs more work</i>	<i>Needs more information</i>
<i>1. Review what I learned last time</i>	<i>X</i>		
<i>2. Study the first standard in Content Domain I</i>	<i>X</i>		
<i>3. Study the second standard in Content Domain I</i>		<i>X</i>	

What I learned today:

1. *How scarcity and opportunity cost affect economic decisions*
2. *The definition of some important terms*
3. *How supply and demand relate to scarcity*

Today's reward for meeting my study goals: *Eating some popcorn*

Appendix D

Blank Daily Study Plan Sheet

Materials I May Need Today:

1. _____
2. _____
3. _____
4. _____
5. _____

Today's Study Location: _____

Study Time Today: _____

(Be sure to consider how long you can actively study in one sitting. Can you sit for 20 minutes? 30 minutes? An hour? If you say you will study for three hours, but get restless after 40 minutes, anything beyond 40 minutes may not be productive—you will most likely fidget and daydream your time away. “Doing time” at your desk doesn’t count for real studying.)

If I start to get tired or lose focus today, I will _____

Today's Study Goals and Accomplishments: (Be specific. Include things like number of pages, sections, or standards. The more specific you are, the better able you will be to tell if you reached your goals. Keep it REALISTIC. You will retain more if you study small “chunks” or blocks of material at a time.)

<i>Study Task</i>	<i>Completed</i>	<i>Needs more work</i>	<i>Needs more information</i>
1.			
2.			
3.			
4.			
5.			

What I learned today:

1. _____
2. _____
3. _____

Today's reward for meeting my study goals: _____