

High School Economics

WEEK #2

Name:

The Economy

You've probably heard people say things like, "The economy is down," or, "Such-and-such would be good for the economy." Maybe you've figured out that the economy has something to do with money. But what is this big, scary "economy" everyone's always worried about? And how can you avoid it?

That was a trick question. You can't avoid the economy! An **economy** is the way goods and services are produced and consumed. Everyone is involved in the economy both by producing goods or services and by consuming them. There are different kinds of economies, and the kind of economy a country has determines how resources get distributed to the people.



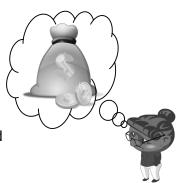


Are You Motivated Yet?

Consumers, Producers, and the Market

Have you ever bought anything or paid someone to do something for you? Then you are a **consumer**—someone who acquires goods and services for their own personal use. Have you ever worked babysitting, walking dogs, or making fast-food tacos? Then you are a **producer**, too someone who makes goods or offers services to others. In a **market economy**, producers are free to decide what to produce, and consumers are free to buy whatever they need and want. Unlike some economies, the government does not tell producers what to make or limit (for the most part) what consumers may buy. This selling and buying takes place in the **market**, which is not a physical place, but instead refers to the entire activity of buying and selling that takes place out in the world.

So, why would anyone decide to produce and sell something? You guessed it—money! **Profit** is the financial gain received by selling something for more than it cost to make it. Producers are motivated by the profits they expect to gain from the goods or services they offer. Their **incentive** to produce—the thing that motivates them—is the idea that consumers will want or need what they are offering. Thus someone who thinks people want phones that respond to voice commands has an *incentive* to produce such phones, because they expect they will *profit* from selling them to lots of consumers.





But what about when two or more producers are offering the same goods or services? This results in **competition**—producers battling over who can make the most profit. Competition is a big motivator. Here's what can happen:

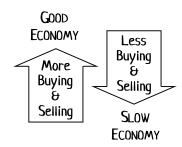
Better Stuff. Competition leads to **innovation**, which is the process of developing newer, better things. Think of iPhones, Android phones, and Windows phones: The producers constantly come out with new versions that have newer, better capabilities. Why? Because each producer wants you to spend your money on *its* phone instead of the other guys' phones.

Good Deals. Competition drives prices down. For awhile, iPad was basically the only tablet on the market. Apply didn't have to worry about people buying other tablets, because there weren't any real choices. But when other tablets came on the market at prices lower than iPad, Apple began to lower its price in order to compete. But deals have limits: Producers have no incentive to offer something for less money than it cost to make it.

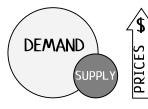
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It's All About Supply and Demand

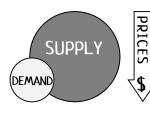
When a market economy is doing well, there is lots of buying and selling. During a "bad economy," buying and selling slows down. The cycle of ups and downs depends mainly on two things: **supply**, the amount of something that is available, and **demand**, the number of consumers who want it. Supply and demand are called **market forces** because they act to make the market function well or poorly.



Supply and Demand Out of Balance



To keep everyone producing, making profits, and buying things, supply and demand must be balanced. Here's what can happen if there is *high demand* but *low supply*: Imagine there is a big freeze in Florida and orange trees are damaged. Fewer oranges are available. If there is still a big demand for oranges, the price will go up. Fewer oranges also means there aren't as many oranges to process. Some people who pick oranges and get them ready to sell might lose their jobs.



On the other hand, *too much supply* with *low demand* can also hurt. Imagine a coal producer is very busy over the summer and mines tons and tons of coal. Winter comes, but it doesn't get very cold. People don't use their furnaces as much as usual, so they don't need as much coal. All of that coal sits around unused—and they certainly don't need to mine any *more* coal. The price of coal will drop, and some people involved in producing coal could lose their jobs because there is already too much.

Scarcity and Opportunity Cost

Imagine your class is deciding whether to sell candy or glow sticks for a fundraiser. Which will earn more money? People like sweets, so you decide to sell candy. In making that decision, your class gives up whatever benefit it might have gotten by choosing to sell glow sticks instead. The benefit you give up by choosing to do one thing instead of another is called **opportunity cost**. When you are in the process of making your choice, you try to determine which choice has more benefits and take a risk that you might be wrong.

The need to choose one thing over another exists because of **scarcity**—the limited amount of resources available. Why not sell candy *and* glow sticks? Probably because it would cost too much up front to buy both. If there were unlimited resources, everyone could have everything they want and need, and there would be no need to make choices. But because of scarcity, producers and consumers must make choices that are sometimes very difficult.



You can't always predict the opportunity cost—but sometimes you can!



s The Command Economy

The opposite of the market economy is the command economy, where the government decides what will be produced, how much will be produced, and how much goods and services will cost. Thus the relationship between supply and demand does not determine what gets produced and consumed. Instead, the government makes those decisions. The government owns the equipment for production, so the government is everyone's employer. There is no private property in a pure command economy, so people can't sell things to make a profit. People are consumers, but they buy what the government produces.

Name:

6 TRAITS OF A MARKET ECONOMY

Private Property

______ something gives you the
right to ______ and ______ it.
Profit would be ______ it.
without the right to own property.
("Property" here means both tangible
______ and land.)

Markets & Prices

Buyers and sellers freely _____ goods and services on the _____ _____. The market forces of ______ and _____ determine what _____ will be.

Incentives/Self-Interest

People's own ______ motivates them to produce, in the hope of making a ______. Self-interest is also an incentive for ______, who seek to fulfill their ______ and ______ at the best price possible.

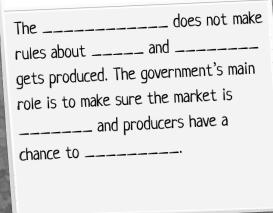
Freedom of Choice

People are free to what
to and what to
The choices
producers and consumers make
determines what and
are available.

Competition

Producers with each
other for by trying to
produce goods and services that will be
most to consumers.
This leads to innovation ()
and better

Limited Government Role



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Note-taking Worksheet

A. Review. Read each scenario. <u>Match</u> each label with the example that illustrates it.



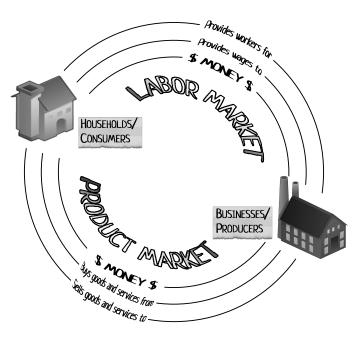
B. Motivated? For each example, circle $\frac{1}{2}$ if the person or business has an incentive to act and circle $\frac{1}{2}$ if they don't.

- Jason is thinking of getting some raspberries, but they're out of season and cost \$6 for a tiny box.
- 2. Acme, Inc. is thinking of making touch-screen computers. It can make computers for \$500 each and sell them for \$2,000 each.
- Beta, Inc. is thinking of making cars that run on water. It will cost \$100,000 to make one car, but people won't pay more than \$40,000 to buy one.
- 4. Ann's house needs a new roof. She is thinking of doing the project this weekend, and roof shingles just went on sale for half price.
- 5. Dr. Smith is thinking of opening a dentist office in Centerville. Right now the nearest dentist is in the next town, 40 miles away.

1) Marla goes to the store and buys a new backpack.

- 2) Tyler mows lawns and does yard work for \$10 per hour.
- 3) Gas Station A sells gas for \$3.75/gallon. Across the street, Gas Station B sells it for \$3.74. Gas Station A lowers its price to \$3.74.
- 4) Liam spends \$10 on lemonade mix and ice. On a hot day, he sets up a lemonade stand in his yard. At the end of the day, he has sold \$20 worth of lemonade.
- 5) A car company made thousands and thousands of cars this year, but people haven't been buying as many cars. The car dealer lots are full.
- 6) Erin could make \$24 this afternoon babysitting, or she could attend her grandma's birthday party. She decides to attend the party. She doesn't get the money, but her grandma is thrilled.
- It's holiday time, and the hottest toy of the year sells out. People are paying ten times what it's worth online.

C. A Circular Flow. There is a circular flow of interaction between consumers and producers in the market. <u>Draw an arrow at one end of each line</u> in the circle to show which way the thing described on that line is flowing.





Name:

D. What's the Opportunity Cost? For each situation, write the opportunity cost—what the person gave up by making the decision. (Hint: Don't worry about math. Describe the cost in words.)

1) Clink or swim?	2) An Interest-ing Choice	3) Risky Business	4) An air-y hard decision
Sam's boss called to offer her an extra shift tonight. Sam wanted the money, but she's got a big swim meet tomorrow and needed sleep. She told her boss to offer the shift to someone else. The opportunity cost was:	Jason can put his money in a savings account and earn about 12 cents in interest this month, or he can loan it to Matt, who says he'll return the money plus \$20 at the end of the month. He loans it to Matt. The opportunity cost is:	Lacey designs dresses. She can keep designing casual dresses that bring \$65 but are easy to sell, or she could design formal gowns that sell for \$500 but must be high	If Zephyr, Inc. spends \$2 million buying out its main competitor, it can earn \$3 million in new sales. If it spends \$2 million designing a new airship, it might make \$4 million if it can sell 10 ships. It buys the competitor. The opportunity cost is:

E. Three Kinds of Economies. You already know about market and command economies. A **traditional economy** exists in primitive cultures where most activity is focused on providing food. People follow the methods and traditions their ancestors have always used. Think about this, and <u>read</u> the statements below. <u>Organize</u> them into the comparison chart by writing the letter of each statement where it should go.

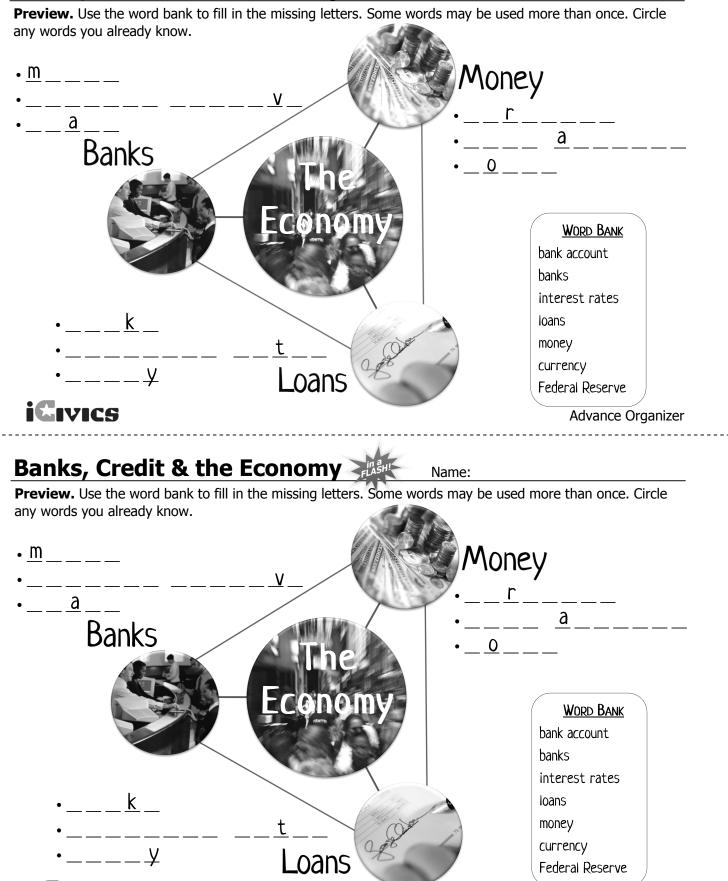
	Market Economy	Command Economy	Traditional Economy
Private Property			
Incentives			
What is Produced			
Competition			

- A. The government decides what should be produced.
- B. The need to survive motivates people to hunt, gather, or farm.
- C. Producers don't compete because everyone works to meet the community's survival needs.
- D. The government sets wages, so people aren't motivated by profit.
- E. Producers compete with each other to make profits from customers.
- F. The government owns the property.

- G. Producers decide what to make based on consumer demand.
- H. Private individuals own the property.
- I. The community's customs and traditions determine what is produced.
- J. Most property is shared by the community.
- K. The hope of profit motivates producers to develop new things.
- L. There is no competition because the government is the only producer.



Name:



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Advance Organizer

Name:

It Makes the World Go Around!

Have you ever tried to imagine a world without money? Give it a try. Okay, done? How did it go? Easy? Probably not. No matter what your views are about money and how important it is, the fact remains: The world runs on money. We all use it to pay for the things we need and want. So what is money, and where does it come from? What role do banks play? And do you really need money? Can't you just use credit instead? It's time to find out.





Automatic teller machines (ATMs) make it easy to turn money stored in a bank account into cash. Bills and coins make up only 7% of the money in circulation in the U.S. Can you explain why?

Money, Money, Money

You think you know what it is, right? It's that cold, hard cash in your pocket—that paper with presidents' faces on it, those coins that say "e pluribus unum." But money is more than just that. **Money** is a "medium of exchange," which means it's what is commonly accepted in exchange for goods and services. Money also sets a common standard of value among people in a country. (Everyone knows what a dollar is, right?)

Money includes coins and notes printed by the government, which are called **currency.** But it also includes things that can be easily changed into currency, such as a deposit in a bank account. Think of it this way: When people say "I don't have any money," they don't just mean they aren't carrying any cash. Usually they mean they also don't have a positive bank account balance that they could turn into cash.

Bank Accounts

Most of the time, when you hear "bank" you think "account." Bank accounts are an important service that banks provide. When you have a bank account, you make **deposits** by putting your money in the bank, and you expect to be able to **withdraw** your money out of the bank whenever you want to.

With a **checking account**, you deposit your money into the bank with the expectation that you will be depositing and withdrawing money from the account often. You get paper **checks** that let you transfer your money to other people. Normally you also get a plastic **debit card** that lets you pay for things with your account money by swiping the card in a store or entering the card number online. It's called a debit card because it *debits*, or withdraws, money from your account. Debit cards also let you use ATM machines to withdraw money from your account.



Paper checks are used less often now that people have debit cards and pay bills online.



With a **savings account**, you deposit your money into the bank with the expectation that you will make limited withdrawals. (There's a reason why it's called a "savings" account.) In fact, federal regulations limit the type and number of withdrawals you're allowed to make each month from a savings account. But there's a benefit: The bank actually pays you to keep money in a savings account. The extra money you earn on a savings account is very low, though, so don't expect to get rich that way.

Reading p.1

Name:

Banks & Lending

So, what happens to the money you put in the bank? Do they carefully take it back to the vault and keep it there until you need it? If that's what you always imagined, you might want to close your eyes for this part: The reason banks accept deposits is so they can let other people use the money. Yes, you heard that right. Banks let other people spend your money when you're not using it! But don't worry, it will be there when you need it.

Here's the thing: Banks are businesses. Businesses want profits. Instead of selling shoes or pizzas to make a profit, banks sell the right to use money. Ever heard of a loan? When you get a **loan** from a bank, you pay the bank to let you borrow money. But the bank wouldn't have any money to lend if nobody put money *into* the bank. That's why saving and lending go hand in hand in the world of banking. A bank pays people to keep money in savings accounts. Then the bank turns around and charges other people a fee for borrowing that same money. The bank makes a profit by charging borrowers a higher fee than it pays to people who have savings accounts.

It's safe to keep your money in the bank!

- 1) Bank deposits are insured by the federal government.
- Banks keep money in reserve to handle the withdrawals people make from their accounts.





The fee charged for a loan is called *interest*. It is charged as a percent of the total loan amount. This percentage is the *interest rate*.

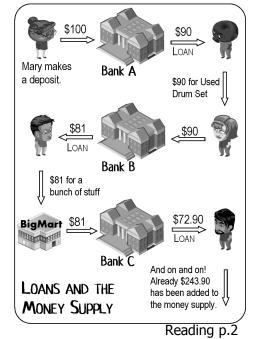
Loans are Big Business

Lending is a huge, HUGE business. Why? Because lots of things are too expensive to pay for outright (think cars and houses.) Businesses borrow even more money than individual people do. Say you want to open an auto repair shop downtown. How are you going to pay for everything you'll need to start your business? Most people would need a loan to do that. Even established businesses need loans to construct new buildings or buy expensive new equipment. The money savers deposit into banks goes back out into the community in the form of loans that are used to build houses, expand businesses, get college degrees, and more.

Loans: A Money Injection

Loans actually increase the amount of money available to spend. Magic? Sort of. When someone makes a deposit, the bank must keep part of the deposit in reserve. The bank is free to lend the rest to someone else. This starts a chain of depositing and lending that actually multiplies the amount of money available!

Here's what happens: Imagine that Mary deposits \$100 into her account at Bank A. Bank A keeps 10% (\$10) in reserve and loans \$90 to Bob. Bob buys a used drum set from Jane for \$90. He writes her a check. Jane deposits the check into Bank B. Bank B keeps 10% (\$9) and loans out the rest (\$81) to Keith. Keith goes to BigMart and buys a bunch of stuff that adds up to \$81. He writes BigMart a check for \$81. BigMart deposits the \$81 into Bank C. Bank C keeps 10%... Get the idea? Follow the diagram to see how Mary's \$100 deposit results in \$1,000 of money being made available for people to use.





Name:



The Federal Reserve headquarters in Washington, D.C. In addition to supervising our banking system, the Fed is the bank for the United States government.

The Federal Reserve

Bees have a queen, aliens have a mother ship, and banks... well, banks have the Federal Reserve. The **Federal Reserve** (known as "the Fed") is the central bank of the United States. It is made up of 12 Federal Reserve Banks—one for each of 12 districts covering the United States. A Board of Governors oversees these banks. Federal Reserve Banks don't deal with the public. They are "bankers' banks."

Together with other agencies in the federal government, the Federal Reserve supervises the banking industry and makes rules that banks must follow. The Fed also oversees electronic payment systems and processes the checks people write. In addition, when banks need coins and paper money, they order currency from the Fed. (Paper money is actually made by the U.S. Bureau of Printing and Engraving; coins are made at the U.S. Mint.) But one of the biggest jobs of the Federal Reserve is to help keep the United States' economy healthy.

The Fed & the Economy

The Federal Reserve works toward three goals for a healthy economy:

- Making sure the highest possible number of citizens have jobs
- Keeping the price of goods and services stable
- Making sure the cost of a loan is not too high or too low

Here's how these goals are related: When interest rates on loans are low, it is cheap to borrow money. This encourages businesses and people to borrow and spend money. With more spending, there is more demand for stuff. Producers want to make more stuff to meet this demand, so they employ more people. In order to attract workers, wages go up. With lots of money in people's pockets but the supply of "stuff" not necessarily meeting the demand, prices can go up. The rise of prices over time is called **inflation**.

Prices can skyrocket if the economy grows too fast, so the Fed works to keep things in balance. It does this by making changes that affect the interest rates that banks charge for loans. Expensive loans discourage people and businesses from making decisions that require borrowing. There is less spending and less hiring, so the economy slows. The Fed keeps an eye on the economy and adjusts loan interest rates up or down as necessary.





Why Loans Work

Maybe you saw that chain of loans on the last page and wondered how all that money could be created out of thin air. Maybe you're thinking, "But there's nothing *behind* that money. Just Mary's \$100!" So why doesn't the whole system just collapse? Because there *is* something behind all those loans: each borrower's ability to pay back the loan. Banks are pretty careful about lending money. They want to know about the borrower's past history of paying back loans, and they want to know that the borrower has a source of income. Income depends on a person's ability to produce goods or services. This is what you do at your job, whether you're farming or designing video games or giving haircuts. Ultimately, the ability to produce is what keeps our economy going.

Reading p.3



Name:

Loans for the Future

A loan always costs more than paying for something outright. That's because banks won't lend money for free. You have to pay back the amount of the loan *plus interest*. Interest can add up to a lot of money over time. Sometimes people take out a loan because they know that, in the long run, they will make more money on what they are buying than they will pay in interest on the loan. In that case, the borrower sees the loan as an **investment**—money spent in order to make more money. Loans to buy a house are viewed as investments because the value of a house normally increases over time. College loans are seen as investments because getting more education usually means you'll qualify for higher-paying jobs. Business loans are also considered investments. When someone takes out a loan to start or expand a business, they are investing in their own ability to produce in the future.



People who take risks to start a new business are called **entrepreneurs**. In a market economy, loans help finance businesses and development of new ideas.



Loans for the Now

On the other hand, sometimes people take out a loan because they need or want something they can't afford to buy outright. These are loans for things that will only decrease in value—or even be used up completely! Cars are an example of something most people can't pay cash for and must buy with a loan. Vehicles decrease in value very quickly, so buying one with a loan almost always means you're paying more than the car is worth. But most people don't have any choice. Vacations are an example of the other extreme. Once a vacation is over, all that's left is a memory. There are lots of great reasons to take a vacation, but if you've paid for it with a loan, you could end up paying the bill—and the interest—for a long time.

The Ugly Side of Lending & Borrowing

The ugly side of borrowing comes when people start to depend on credit. This can happen because of too much spending, expensive emergencies, or other financial problems. Very often, people in this situation already have a limited income. That makes it difficult to pay back their loans and credit cards. When you don't make a loan or credit card payment on time, there are severe penalties. First, the bank may raise your **interest rate**, which determines how much interest you pay on the loan. Starting with your next payment, you'll be paying more. A *lot* more. The bank also reports you to the three **credit reporting bureaus**—companies that keep track of your credit history. A bad credit history can make it hard to get any credit at all. Any credit you do get will be very expensive because the lender will be afraid you won't pay it back.





Sometimes people have a reasonable income, but they've let their spending get out of control. They're buying way more stuff than they can pay for, and they're buying it all with credit. Even if they're making all their payments on time, they're wasting tons of money on interest. This lifestyle can make it hard to save money for the future, which can mean disaster when there's an emergency. Taking out even more loans to meet the crisis may be difficult or make the problem worse. People in these situations often turn to a trustworthy **credit counseling** service to help them make a plan to pay off their loans and learn to live within their means instead of relying on credit.

Name:

A. Helps people control their finances and use credit wisely

D. A medium of exchange that sets a common standard of value

I. A person's source of money, dependent on the ability to produce

B. The fee charged for the right to borrow money

F. People who take risks to start a new business

H. Paying a bank to let you borrow money

J. The central bank of the United States

K. Take money out of a bank account

G. Coins and paper money printed by the government

A. Vocabulary. Match each word with its definition. Some words are not in bold in the reading.

C. The rise of prices over time

E. Put money into a bank account

- ____1. Money
- ____2. Currency
- ____3. Deposit
- ____4. Withdraw
- ____5. Loan
- ____6. Interest
- ____7. Federal Reserve
- <u>8</u>. Inflation
- ____9. Income
- ____10. Reserve
- ____11. Investment
- ____12. Entrepreneur

____14. Credit counseling

- _____13. Credit reporting bureau
- M. Company that keeps track of your credit history

L. Money that a bank keeps and does not lend out

N. Money spent in order to make more money

B. The Fed. Put an X by each statement that is TRUE about the Federal Reserve.

- ___1. The Fed sets rules that banks must follow.
- ___2. The Fed can affect the interest rates that banks charge for loans.
- __3. The Fed creates money out of thin air, so there's always enough.
- ___4. The Fed's goal is to keep the economy healthy.
- __5. People can set up checking and savings accounts at the Fed.
- __6. The Fed tries to keep employment high and prices stable.
- ___7. The Fed processes checks and electronic money transfers.
- ___8. The Fed supervises the banking industry.
- ___9. Coins and paper money are made by the Fed.
- __10. There is a Federal Reserve bank in every state.

C. Loans. Follow the directions in each box.

Draw one way a loan could help someone earn more money in the future:

Draw one way a loan could cause someone to spend too much or have other problems:



Worksheet p.1

D. It's Called Money, Honey. Below is a list of everything Sam has and how much it's worth. <u>Mark</u> the things that are considered money. Then add to find out how much money Sam has.

- Home: Trailer and land worth \$100,000; owes \$83,000
- Coins in old jar on desk: \$15.62
- Chicken coop: 1 dozen eggs per day, worth \$2/dozen
- Savings account balance: \$4,023.77
- Paper bills inside wallet: \$47
- Personal items: Household stuff worth about \$2,500
- Vehicle: 2002 pickup truck worth \$2,200
- Checking account balance: \$567.90
- Act of kindness: Brother owes him \$175



Sam has this much money: \$_____

Name:

E. Banking Blunders. Each of these people has made a banking mistake. Read what they're saying and tell them where they're going wrong.



I don't want two bank accounts. I'll just get a savings account, and each month I'll have my bills electronically deducted. Let's see... rent, phone, electric, water, cable, insurance, internet, gym...

Problem:_____



This awesome sound system is on sale for \$1,543! I've only got \$800 in my checking account, but that's okay—I'll pay for it with my debit card.

Problem:_____



My girlfriend wrote a love poem on a \$5 bill and I accidentally deposited it into my savings account! I'll go make a \$5 withdrawal. They'll get it from the vault and give it back.

Problem:



My grandma gave me \$500 for my birthday and helped me open a savings account. Tomorrow I'm quitting my pizza delivery job, because now the bank's going to pay me!

Problem:_____

F. An Interesting Situation. People can end up paying a lot extra for a car because they only pay attention to the monthly payment they're being offered. Which of these loans will cost you MORE?

