

Buy Now, Pay Later

A THINKLAW MATH LAB

OBJECTIVE	Thinkers will use addition, subtraction, and multiplication t o determine if payment plans are fair.
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Lesson Outline

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- 1. In the thinkstarter, thinkers will analyze a real-life legal case where a woman entered an expensive payment plan with Rent-A-Center.
- 2. Thinkers will consider payment plans. Why do we have them? How do they work? Are they fair? Thinkers will learn that when it comes to payment plans, you need to use your math skills to move from a gut reaction to an informed opinion.
- 3. Thinkers will go through 4 examples of payment plans. They will share their gut reactions to the plan before calculating the final costs. Thinkers will analyze the final costs to make an informed opinion about the deal.
- 4. Thinkers will then offer advice to a relative about two of the plans.
- 5. In the thinkBigger, thinkers will assume the role of a salesperson. How could they sell each payment plan to a customer?



Indiana Academic Standards

Algebraic Thinking

3.AT.3: Solve two-step real-world problems using the four operations of addition, subtraction, multiplication, and division

4.AT.1: Solve two-step real-world problems using the four operations of addition, subtraction, multiplication, and division

5.AT.5: Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation.

Standards for Mathematical Practice

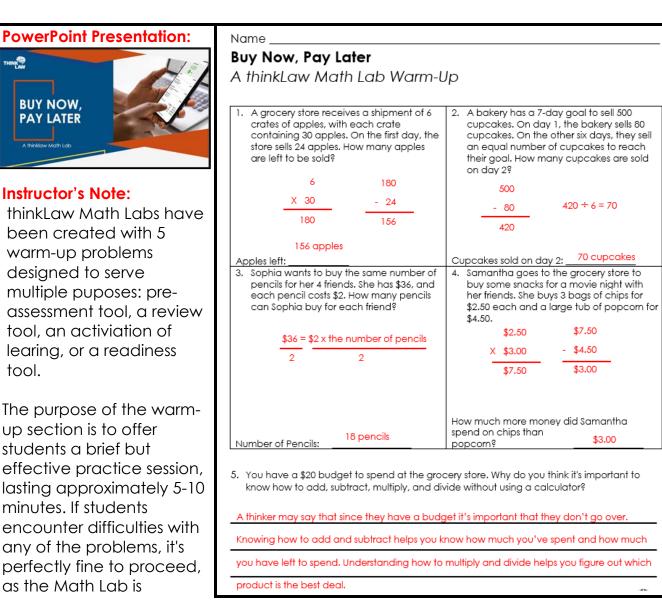


PS.1 Make sense of problems and persevere in solving them.	PS.2 Reason abstractly and quantitatively.	PS.3 Construct viable arguments and critique the reasoning of others.	PS.4 Model with mathematics.
PS.5 Use appropriate tools strategically.	PS.6 Attend to precision.	PS.7 Look for and make use of structure.	PS.8 Look for and express regularity in repeating reasoning.

Lesson Materials



- thinkLaw Student Work pages
- Writing Utensils
- Calculators



structured to provide support and scaffold their learning.

In the slides provided, you'll find a designated prompt indicating where to incorporate the warm-up section with your students. The slide can also serve as an opportunity to review the answers to the warm-up problems together with your students before continueing on with the math lab.

For convenience, we recommend printing the warm-up and cool-down sections front to back on a single sheet of paper, facilitating easy access and organization during the Math Lab session.

Name

Buy Now, Pay Later

A thinkLaw Math Lab

thinkStarter (Perez v. Rent-A-Center, New Jersey, 2005)



Hilda Perez needed some items for her home. Hilda went to a Rent-A-Center.

Rent-A-Center is a store that allows people to rent items. A customer can rent furniture or electronics for a weekly or monthly fee. People can eventually

own the items after they have paid the full cost of the items. Or people can return the item to the store and stop paying rent.

Hilda rented used furniture, a used washer and new dryer, a used DVD player and television, a new computer, and a used large screen television and cabinet. Hilda agreed to pay weekly rental payments.

Total Cost Hilda Would Have Paid to Buy Those Items Up Front \$9,301.72	Total Cost Hilda Paid with This Agreement \$18,613.32	
How much extra did Hilda need to pay for renting-to-own the items?	What is your gut reaction? Why?	
\$18,613.32	Thinkers may say that the final cost is outrageous. Hilda would need to pay	
- \$9,301.72	double the total price to use the rent- to-own plan. Other thinkers may say	
\$9,311.60	that Hilda agreed to the plan, and she should have thought about the final repayment total. There are some items, like two TVs that she might not have really needed.	
Thinkers should subtract the total cost from the final cost.		

thinkStarter Summary

Hilda had to pay a significant amount of money to use a payment plan. How do you know if a payment plan is a fair deal? In today's thinkLaw lesson we will look at some offers and determine if they are a fair deal.

PowerPoint Presentation:



Instructor's Note:

Thinkers may struggle to understand why someone would not just use their paycheck to repay the pay day loan. Point out that people need those paychecks to pay for their regular expenses like food, gas, rent, etc. Often, people are left paying these bills long after the event has passed.

Probing Questions:

Whom do these loans target? Think of where you have seen these stores. Where are they located? Why do you think these locations were chosen?

- What are other ways people could get the money?
- What if none of those other ways were options?
- Do you think if people had multiple options for money, they would go to a payday loan store? Why or why not?
- Whose job should it be to make sure deals are fair? Why should that person be responsible?
- Often when making a purchase or loan, you can negotiate or ask for a different deal. What questions should you ask if you are trying to get yourself a better deal?
- Imagine you are out with your friends. You are very, very hungry but do not have any money. One friend offers to loan you \$10 but says you must pay him back \$45. What would you say to that friend? Why?

Instructor's Note:

This case went all the way to the New Jersey Supreme Court. Hilda won.

Payment plans, in some form, have long been a part of our history. When a Court decides about payment plans, some courts look hundreds of years ago at how deals were structured.

- How does history help us make better decisions about our future?
- How do BAD examples of past payment plans help us make better rules?
- How do GOOD examples of payment plans help us make better rules?
- Why is it important to look at good and bad examples?

Instructor's Note:

 Talking about gut reactions is a good way to develop critical

How Do Payment Plans Work?

A **payment plan** is when a person buys an item but instead of paying the full price immediately, they make smaller payments until they pay off the full price.

It is almost always cheaper to pay the whole amount for an item up front. If you make smaller payments, you usually end up paying more than the original amount.

Why would a company charge people extra money to make smaller payments on an item?

This is a way for a company to make money. You are borrowing from the company, so they can charge a fee for that service. Do you think that is fair? Why or why not?

Thinkers may choose either option. Thinkers may say that companies should charge a fee for a payment plan, but the fee should be reasonable. Thinkers might say it is unfair for a person to pay double the original cost with a payment plan.

Payment plans are important.



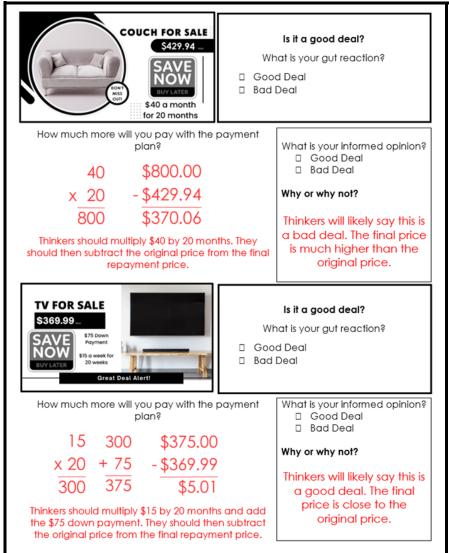
Making smaller payments over time can be a way for people to get items they need. There are many items that most people cannot buy without a payment plan. Items like cars, houses, and other large purchases can be too expensive to pay for all at once. If there were no payment plans, most families would never be able to buy cars, houses, and other expensive items.

You can look at a deal and have a **gut reaction** if the offer is a good deal or a bad deal. But you can use math to move from a gut reaction to an **informed opinion!** Using your math skills will help you make better decisions with your money. Let's look at a few deals together.

thinking dispositions. Everyone has a gut reaction. What is important is being able to recognize your first reaction and set it aside while you look at both sides of an issue.

Thinkers may have never considered payment plans, but they have other experiences that will impact their thinking on these issues.

- Have you ever wanted an item that you could not buy right away? What happened? How did you feel? Why can it be hard for people to wait for items they want to buy?
- Have you or your family bought an item with a payment plan? What happened? Did your family need to sign paperwork for the deal?
- If you had something for sale and someone wanted to pay you a little bit of money at a time, would you accept that deal? Why or why not? What would you do to make sure they paid you the money back?



many ways to approach problems.

Instructor's Note:

Thinkers begin each exercise by identifying their gut reactions. As they have had time to think and do their calculations, they may have changed their minds about the fairness of the deal. This is a normal process! Thinkers were not "wrong" to have an opinion at the beginning of exercise that changed after they completed their calculations. A gut reaction is just a fast opinion. With more information, they were able to develop a more informed opinion on the case. This exercise helps develop the critical thinking disposition of maturity.

Instructor's Note:

At first glance, these four deals might appear similar. The larger takeaway is to be sure you are getting a good deal; you should do the math.

For each example, ask the class to vote about their gut reaction. Allow thinkers to share how they made their decision. As they progress through the examples, thinkers' explanations may get more specific.

 If a thinker says that they estimated, be sure to acknowledge that estimation is a fantastic way to use your math skills to help you solve a problem if you do not have a chance to stop and do all the calculations. There are

Probing Questions:

- What questions should you ask before you agree to a payment plan? Why are the answers to these questions important?
- Should businesses be required to tell the final total for repayment at the end of the plan? Who is responsible for the math: the business or the customer? Why?
- Would you rather make small weekly payments or bigger monthly payments? Why? What is the best argument for each option?
- What would the world look like if payment plans did not exist?
- What do you think a person can do if they agree to a payment plan and then later realize the deal was not fair?

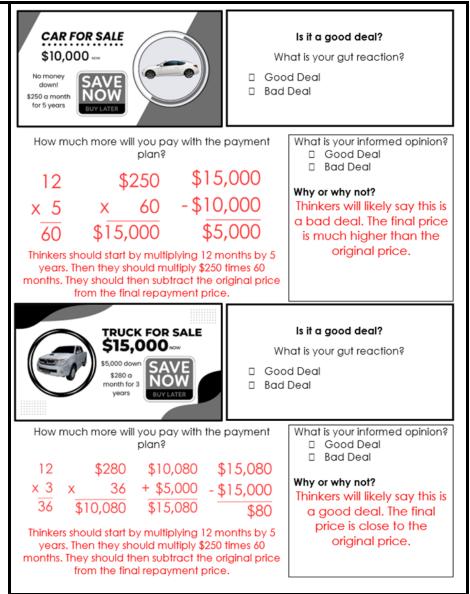
Instructor's Note:

Each example contains slightly different details.

- Example 1: The first example uses monthly payments.
- Example 2: The second example uses weekly payments and a down payment
- Example 3: The third example lists a monthly payment for 5 years. Thinkers will need to calculate the number of months in 5 years.
- Example 4: The fourth example also lists the monthly payment but requires a down payment.

Point out these differences.

- Why do you think they're each a little different? Do you think the people that advertise deals might try to trick people? Why or why not?
- What can you do to keep from being tricked?
- Do you think the phrase "No money down" might trick people into thinking an offer is a good deal? Why or why not?



thinkAdvice

Imagine your cousin is thinking about agreeing to this payment plan. What advice would you give them? Why?



This seems like a pretty good deal. What do you think I should do?



Your Advice:

Be careful! To decide if the couch is a good deal, you need to do the math. You need to multiply \$40 times 20 months to see then final payment. When you do the calculations, you will see that the final cost of the payment plan is \$800. That is \$370.06 higher than the original price.



I saw this ad for a TV. What do you think? Should I buy the TV?



Your Advice:

To decide if the TV is a good deal, you need to do the math. You need to multiply \$15 times 20 weeks. Then add in the price of the down payment to see then final payment. When you do the calculations, you will see that the final cost with the payment plan is \$375. That is close to the original price of the television. This appears to be a fair deal.

What is the **MOST IMPORTANT** advice you can give someone about a payment plan? Why?

You may have a gut reaction about the deal, but to have an informed opinion you need to press pause and do the math to see how much you will end up needing to pay back.

SEL Instructor's Note:

When you are facing a tough decision, it is a good idea to get advice from other people.

- How does asking for advice help you make a better decision?
- How do you decide if you should trust the advice you have been given?
- Whom do you ask for advice from when you have a tough decision? Why?

Instructor's Note:

When lawmakers and lawyers work to create rules and laws, they often look at many resources to synthesize the information. **Synthesize** means to combine parts to make a whole.

The act of giving advice

Is a great way to practice sythesizing. When a thinker gives advice that connects to the topic they're studying, they are pulling together what they have learned and analyzing the information to determine what's the most critical parts.

Probing Questions:

- Would you give everyone you know the same advice? Why or why not? Would you give a billionare the same advice as someone who does not have any money? Why or why not?
- Should every item be available with a payment plan? Why or why not? What are the top 3 items you think should be bought with a payment plan? What are the top 3 itmes you think should not be bought with a payment plan?

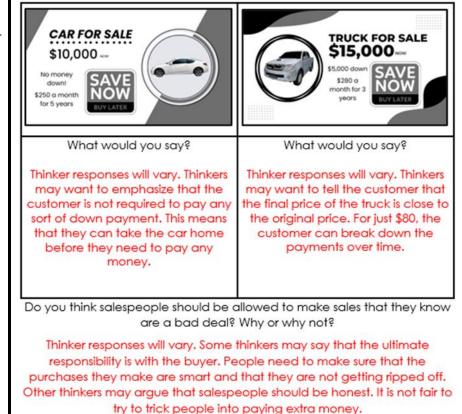
You may introduce thinkers to the concept of **cherry picking**. Cherry picking is when you only include the information that supports your point of view, and you do not talk about the information that does not support your point of view.

- What information would make this look like a good deal?
- What information would make this seem like a bad deal?
- Why might a salesperson only want to mention the good information?

thinkBigger

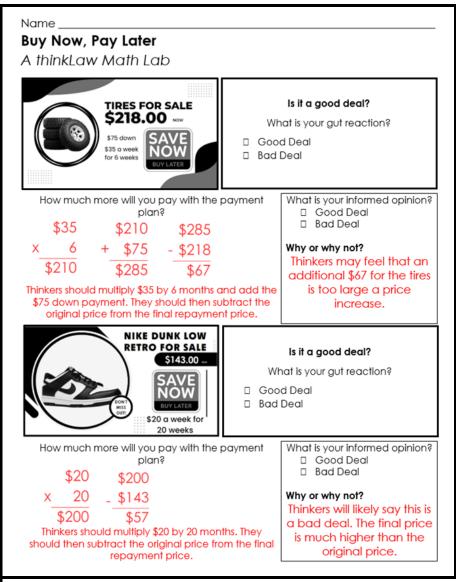
People often agree to payment plans after speaking with a salesperson. A salesperson's job is to get someone to agree to accept a deal.

Pretend you are a salesperson; what would you say to convince someone to take the deal?



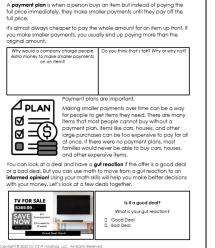
Probing Questions:

- What questions do you think a customer would ask you about this deal? How would you answer these questions?
- Why would a customer tell you that they do not want to take the deal? What can you say in response to that argument?
- Is purposely leaving out information the same as lying? Why or why not? How would your parents answer that question?
- If you know that a salesperson is probably only going to tell you the good information, how does that help you make better decisions?
- Many people like to take someone with them if they are thinking about buying a car. Why would it be helpful to have another person with you when you go to make a major purchase?
- If someone is trying to sell you something, whom can you ask to give you advice? Why is that person a good person to ask for advice?



thinkLaw math labs also include take-home student sheets that are available in English and Spanish. Encourage thinkers to try a mini version of the lesson at home with their families! Asking thinkers to reteach the lesson to their parents helps thinkers to practice synthesis and gives them additional practice with the material.

Buy Now, Pay Later



After the Lesson:

thinkLaw math labs

include exit tickets for

additional practice.

Un plan de pugo el precio total de inmediato, hacen pagos mas pequen hasta que se paga el precio total. Casi sempre se más barato pagar el total completo de un artículo por adelantado. Si realizas pagos más pequeños, por lo general terminas pagando más que el total original. que eso es justo? ¿Por qué sí o p qué no? Los planes de pago son importantes

Compra Ahora, Paga Después

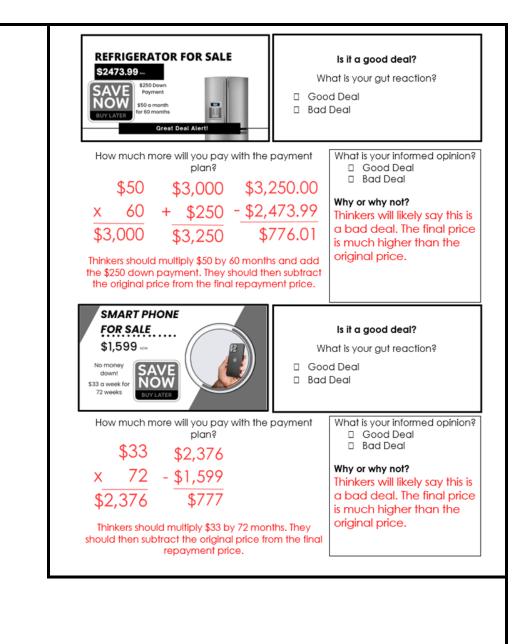
Un **plan de pago** es cuando una persona compra un artículo, pero en lugar de pagar el precio total de inmediato, hacen pagos más pequeños

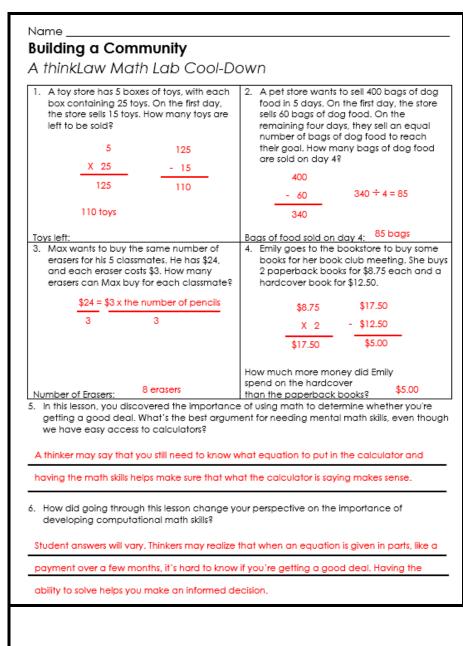


Hacer pagos más pequeños a lo largo del tiempo puede Hace pages may pequents a lo largo del tempo puede ser uno manero para que las personas obtengan los anticulos que necesitan. Hay muchos artículos que la moyoría de la gente no puede compara si un plan de agrandes puedenses de las densitas y otras compara vez, si no tubiera planes de las densitas runca podrán compara automóviles, casas y otras artículos contos automóviles.

Puedes miror una oferta y tener una reacción inicial a si la oferta es una buena a mala oferta. Jiéra puedes usar las matemáticas para pasar de una reacción inicial a una opinión informadal tusar tun babilidades de matemáticas le oyudará a lomar mejores decisiones con lu dinero. Estemas un visitava a algunas dertas juntos.







Within thinkLaw Math Labs, you'll find 5 Cool-down problems strategically integrated to serve as a demonstration of learning or a post-activity assessment.

The goal of a math lab is to empower students to redefine their math identity – reshaping how they perceive and interact with math.