Lesson Description

Students read four scenarios involving take-home pay and fees that banks and credit card companies charge, along with what-if alternatives for each scenario. Working in pairs, the students calculate the amount of currency that the characters in each scenario saved or lost as a result of their decisions. The students play a second version of "Keep the Currency" from Lesson One. From this game, which serves as a post-test for the unit, the students learn that financial literacy is important in keeping currency—and that keeping (or saving) currency as a result of knowledge about finances can be the same as earning.

Concepts

Fees
Gross pay
Net pay
Disposable income
Saving

Objectives

Students will:

- Explain the difference between gross and net pay.
- Evaluate their financial literacy skills.
- Explain the importance of financial literacy.
- Explain the importance of taking responsibility for personal financial decisions.

Content Standards

National Standards in K-12 Personal Finance

Financial Responsibility and Decision Making: Apply reliable information and systematic decision making to personal financial decisions.

- **Standard 1:** Take responsibility for personal financial decisions.
  - Eighth-grade expectation 1: Identify ways to be a financially responsible young adult.
  - Eighth-grade expectation 2: Give examples of the benefits of financial responsibility and the costs of financial irresponsibility.
  - Twelfth-grade expectation 1: Explain how individuals demonstrate responsibility for financial well-being over a lifetime.

- **Standard 4:** Make financial decisions by systematically considering alternatives and consequences.
  - Eighth-grade expectation 3: Evaluate the results of a financial decision.
  - Eighth-grade expectation 4: Use a financial or online calculator to determine the cost of achieving a medium-term goal.

Planning and Money Management

- **Standard 4:** Apply consumer skills to purchase decisions.
  - Eighth-grade expectation 1: Explain the relationship between spending practices and achieving financial goals.

Income and Careers

- **Standard 3:** Describe factors affecting take-home pay.
  - Eighth-grade expectation 1: Explain all items commonly withheld from gross pay.

Saving and Investing

- **Standard 1:** Discuss how saving contributes to financial well-being.
  - Eighth-grade expectation 1: Give examples of how saving money can improve financial well-being.

National Standards in Economics

- **Standard 4:** People respond predictably to positive and negative incentives.
  - Benchmark 1, Grade 12: Acting as consumers, producers, workers, savers, investors and citizens, people respond to incentives in order to allocate their scarce resources in ways that provide the highest possible returns to them.

Time Required

135-180 minutes

Materials

- Visuals 5.1, 5.2 and 5.3
- A copy of Handout 5.1 for each student
- A copy of Handout 5.2 for each student
- A calculator for each student
- A copy of Handout 5.2–Answer Key.
- Enough copies of Handouts 5.3, 5.4, 5.5 and 5.6 to give each student one of the four handouts (enough copies of each handout for one-fourth of the students)

- Enough copies of Handouts 5.3, 5.4, 5.5 and 5.6–Answer Key for each student to have a copy of the answer key corresponding to the handout he or she is given
- A copy of Handout 5.7 for each pair of students
- Enough copies of Handouts 5.8 and 5.9, cut apart, to provide one set of "T" and "F" cards to each pair of students. Copy Handout 5.8 on paper of one color and Handout 5.9 on paper of another color before cutting the handouts apart.
- A copy of Handout 5.10 for the teacher
- (Optional) Small prizes for the student pairs who have kept the most currency at the end of the "Keep the Currency" game

Procedures

1. Display *Visual 5.1: Payday Decisions* and distribute a copy of *Handout 5.1: Payday Decisions* to each student.

2. Discuss the difference between net pay and gross pay. Define **gross pay** as the amount earned per pay period before any deductions or taxes are subtracted, and define **net pay** as the amount received after all deductions have been subtracted from a paycheck. Give examples of deductions from a paycheck, such as Social Security tax, Medicare tax, income tax and optional deductions such as insurance. Point out that net pay can be much less than gross pay.

3. Explain that net pay and disposable income are different ways of looking at the same amount of currency. Net pay is the amount a worker takes home, but it also reflects the amount available to spend or save, called **disposable income**.

4. Tell the students that although the amount of disposable income varies from person to person based on an individual's circumstances, all people face the same task: using the amount of their disposable income to best secure their wants now and in the future. Regardless of the amount of their net pay, people must decide how to use their disposable income for the greatest benefit.

5. Refer to Visual 5.1 and tell the class that the circle on the visual represents disposable income. The circle is divided into equal sections that represent categories for spending disposable income.

6. Demonstrate how a person might use his or her disposable income by writing the following examples of spending decisions into the sections on the visual:
   - Write "car payment and expenses" across four sections of the circle.
   - Mark four sections "food."
   - Mark two sections "clothing."
   - Mark six sections "rent."

- Mark two sections "utilities."
- Mark two sections "miscellaneous expenses."

7. Remind the students that personal responsibility involves informed financial decision-making based on individual values. Point out that one person's good decision may not be a good decision for another person. For example, a person who lives in a city may choose to use city public transportation rather than use part of her or his disposable income for making a car payment, whereas another person might not have reliable access to public transportation and so might find it important to purchase a car.

8. Tell the students to imagine they are deciding how to use disposable income of their own. Instruct the students to designate how they think they should use their disposable income by writing the decisions they would make into the sections on Handout 5.1. Allow time for the students to share their decisions. Discuss the ways in which the students' decisions differ, as well as the ways in which they are similar.

9. Ask if anyone included a "saving" category in their plan. Define **saving** as income not spent on current consumption or taxes. Saving involves giving up some current consumption for future consumption. Explain that saving should be thought of as an obligation, in much the same way that people think of rent or utilities. In this case, the obligation is to oneself to secure his or her future. Disposable income provides currency for spending and for saving.

10. Explain that a suggested rule of thumb for young adults is to save 10 percent of their disposable income. Have students suggest adjustments that could be made to their plans to accommodate saving 10 percent of their disposable income. Discuss the following:
    - How many sections of the circle represent 10 percent of your disposable income? *(There are 20 segments; 2 segments represent 10 percent.)*
    - What would you give up today in order to save for future purchases? *(Answers will vary.)*

11. Distribute a copy of *Handout 5.2: Figure it Out* to each student. Tell the students that **fees** are money charged to service an account, such as late fees, overdraft fees, over-the-credit-limit fees and maintenance fees. Fees resulting from misuse of bank accounts or credit cards reduce the amount of currency people have available as disposable income. Remind the students that when money (currency) is used for one thing it cannot be used for another. If disposable income is being used to pay fees, that part of disposable income cannot be used for other things.

12. Distribute a calculator to each student. Instruct the students to use the calculators to complete Handout 5.2.

13. After the students have completed the handout, have them share information about what they "figured out." *(Answers may vary but should include differences in the amount of money available for spending after deducting the fees charged.)* Discuss the following, using Handout 5.2—Answer Key as a guide.

    - Though all four people had the same amount of disposable income, who had more disposable income to spend or save as he or she wanted? Why? *(Bob had $2,440 to spend or save each month, which was more than the other three people had. This was because he incurred fewer fees than the others. He also had more disposable income to spend after one year [$29,280] for the same reason.)*
    - Even though all four people had the same amount of disposable income, who had the least amount to spend or save as she or he wanted? Why? *(Michelle had only $2,380 to spend or save each month, which was less than the other three people had. She incurred more fees, so she had less disposable income available to spend on other things. She also had the least amount of disposable income to spend after one year [$28,560] for the same reason.)*

14. Ask the class to recall Visual 5.1. Ask the students what new category would have to be added to the visual if the four people from Handout 5.2 had to designate how their disposable income should be allocated. How would the addition of this category affect other categories? *(A section would have to be included for fees. This would decrease the size of other categories for utilizing disposable income.)*

15. As an out-of-class assignment, distribute a copy of either *Handout 5.3: Figuring for Michelle, Handout 5.4: Figuring for Juan, Handout 5.5: Figuring for Sasha* or *Handout 5.6: Figuring for Bob* to each student, so that each student has just one of the four handouts. Tell the students that when they read their handout, they should examine the alternatives presented for the person in their handout and calculate the amount of currency that person saved or lost in each case as a result of decision making. Remind the students to bring their completed handouts to the next class. The students will need to use a calculator and an online calculator found at: http://www.math.com/students/calculators/source/compound.htm.

16. When the students bring their completed assignments to class, distribute a copy of Handouts 5.3, 5.4, 5.5 and 5.6–Answer Key to each student, so that each student has the answer key for the handout he or she was assigned. Tell the students to use the answer keys to review and correct their work on the handouts. Allow time for the students to complete this task.

17. When the students have finished reviewing and correcting their handouts, ask the following questions:

    - What difference can throwing away money by paying fees make to disposable income? *(Answers may vary but should stress that fees reduce the amount of disposable income that is available to spend on other things or to save.)*

- What difference can avoiding fees make to disposable income? *(Answers may vary but should stress that avoiding fees increases the amount of disposable income that is available to spend or save.)*

Closure

18. Review the key concepts in the lesson by asking the following questions.
    - What is the difference between gross and net pay? *(Gross pay is the amount earned per pay period before any deductions or taxes are subtracted. Net pay is the amount received after all deductions and taxes have been subtracted from a paycheck.)*
    - Have your financial knowledge and skills improved as a result of the *Cards, Cars and Currency* lessons? *(Answers will vary.)*
    - Why is financial literacy important? *(Having and applying financial knowledge enables people to "hold on" to more of their hard-earned income.)*
    - Do you think that if you played another round of "Keep the Currency" right now, you would keep more currency than you did the first time that you played? *(Answers will vary.)* Why? *(I know more now than I did before.)*

19. Divide the students into pairs. Give each pair of students one copy of *Handout 5.7: Keep the Currency Score Sheet* and two cards—one T and one F card—cut from Handouts 5.8 and 5.9, or retained from Lesson One. Explain the rules of the game as follows:
    - Each pair of students starts the game with $200 in currency. The object of the game is to keep as much of this currency as possible by providing correct "true" or "false" responses to 20 statements.
    - The teacher reads aloud the statements from *Handout 5.10: Keep the Currency Statements with Answers*. After each statement, the student partners should confer with one another to reach an agreement and hold up a card to designate their answer when given the signal by the teacher.
    - When all pairs are holding up their cards, the teacher will announce the correct answer. Pairs holding a card indicating the correct response can keep their currency. If their answer is incorrect, they subtract $10 from their balance.
    - On Handout 5.7, each pair of students should circle either "Keep your currency!" if the question was answered correctly or "Deduct $10" if the question was answered incorrectly. After each response, each pair of students also should enter its updated total of currency kept on the "Current Balance" line.
    - After all statements have been read, students who have retained the most currency win. (Optional: Award prizes to the pairs that kept the most currency.)

20. After the game is completed, discuss the game. Ask the student pairs that kept more currency than when they played the game the first time, why they were able to keep more currency. *(because they have additional knowledge and skills)*

Assessment

21. Ask the students to recall the very beginning of the unit, when you threw currency into the wastebasket. Ask the students if they agree that currency is thrown away every day because of poor personal financial decisions. *(Most students will say yes.)*

22. Ask the students what they know about Ben Franklin. *(Answers may vary, but specifically discuss the fact that his portrait is on the $100 bill.)*

23. Tell the class that more than 200 years ago, Ben Franklin was concerned about financial decision-making. Display *Visual 5.2: Quotations from Yesteryear.* Read the two quotations from Ben Franklin and allow time for class discussion.

24. Tell the students that another Ben, Ben Bernanke, is the chairman of the Federal Reserve System. Ask the students if they have heard or seen Chairman Bernanke on news programs.

25. Display *Visual 5.3: A Current Quotation* and read the statement on the visual, which was made by Ben Bernanke.

26. Tell the students to choose one of the quotations from the two visuals and write an essay in response to the quotation, using information learned in this unit. The essays should include information on how making wise financial decisions can result in having more disposable income.

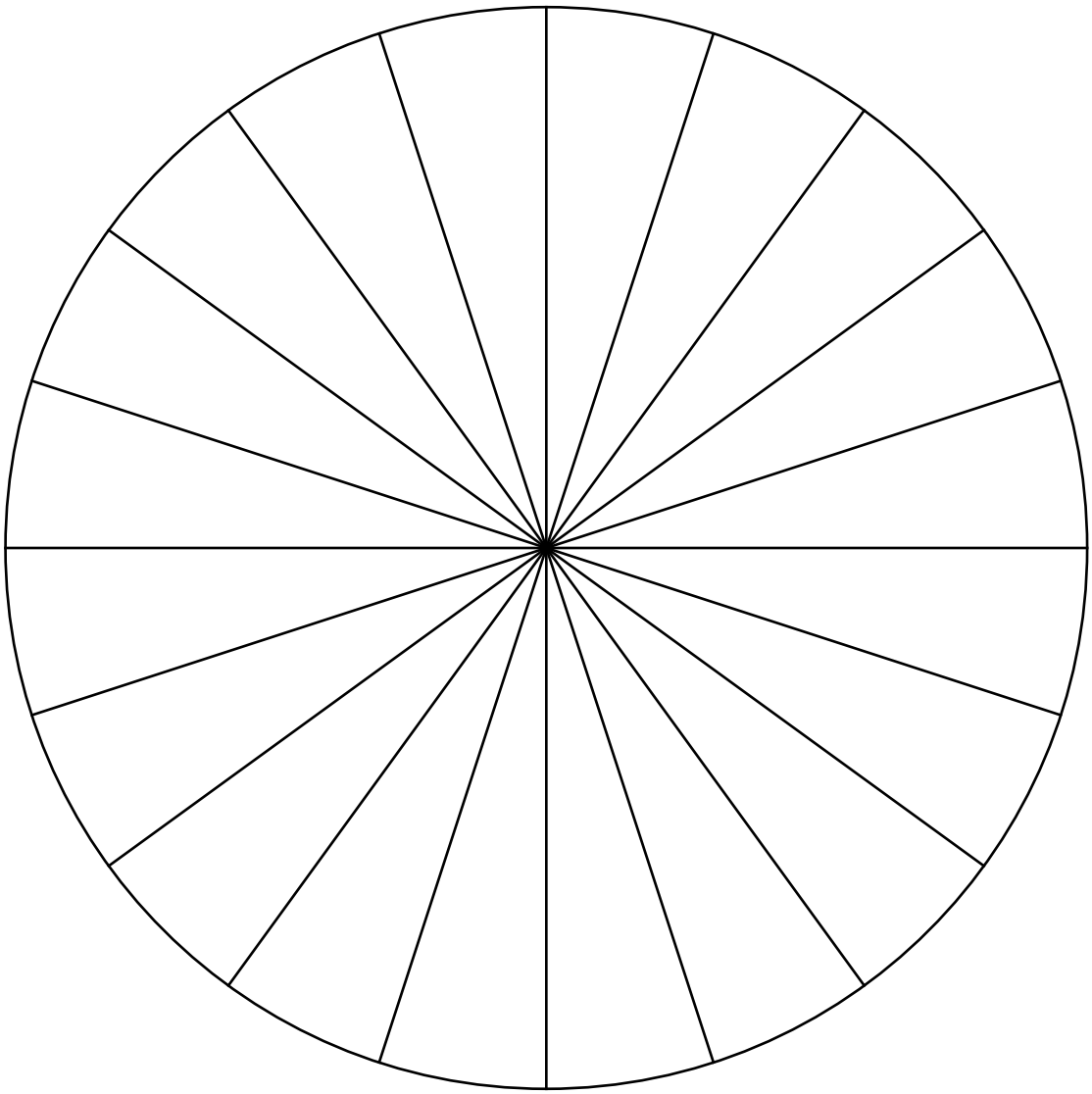
Extension Activities

27. Instruct students to find and collect newspaper articles pertaining to the Federal Reserve System and Chairman Bernanke. Display the collection on a bulletin board with the caption "In the News."

28. Instruct the students to use research skills to find quotations about money, saving and spending made by people throughout history. Write the quotations with their authors on sentence strips and attach them to a bulletin board with the caption "Money: It's Worth a Quote."

Visual 5.1: Payday Decisions

- **Gross pay** – The amount earned per pay period before any deductions or taxes are subtracted.
- **Net pay** – The amount received after all deductions or taxes have been subtracted from a paycheck.
- **Disposable income** – The amount of money a person has available to save or spend.



Visual 5.2: Quotations from Yesteryear

"If you would be wealthy,
think of saving as well as getting."

"A penny saved
is a penny earned."

Benjamin Franklin
(1706 – 1790)

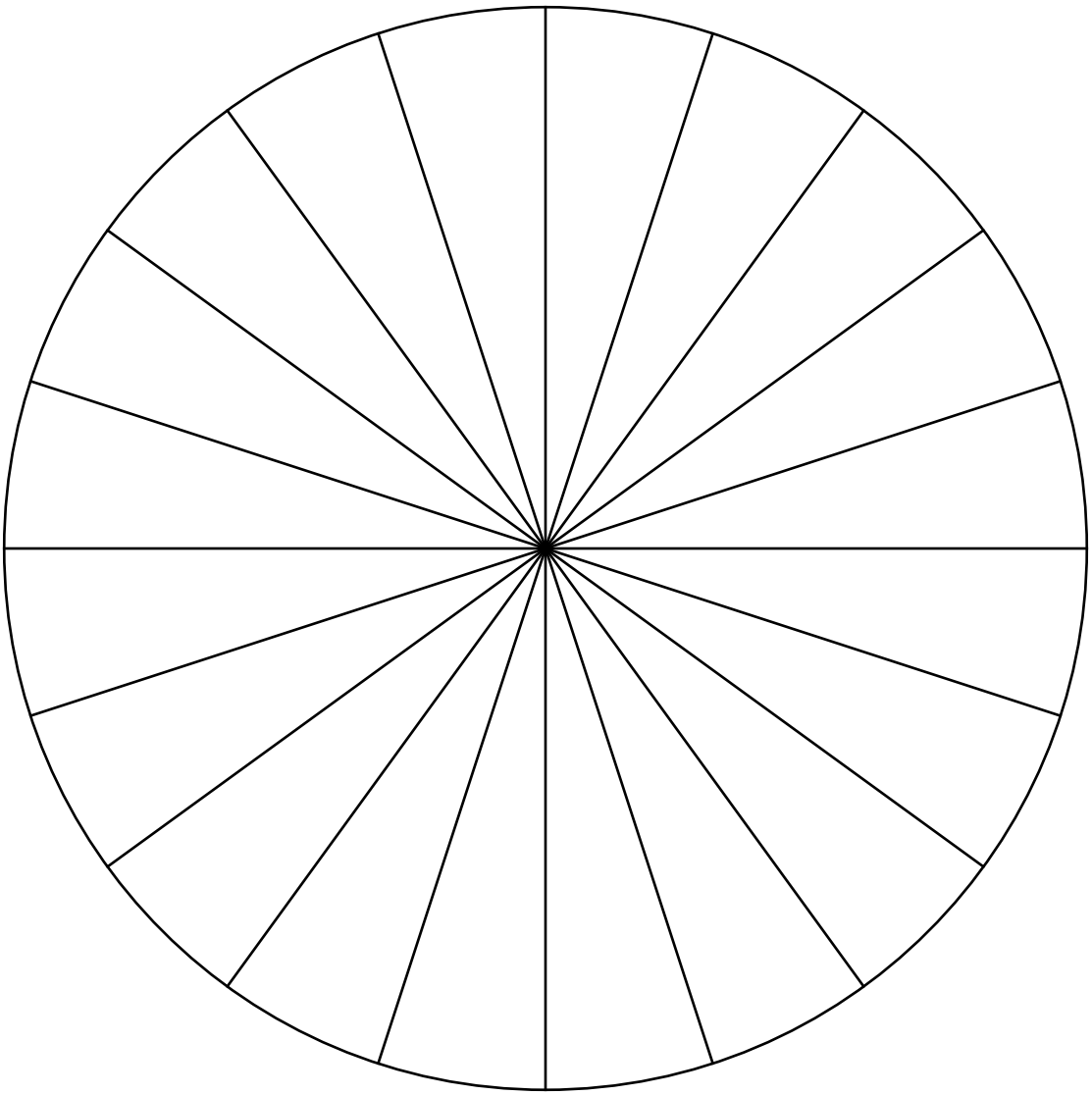
Visual 5.3: A Current Quotation

"I am personally convinced that improving education is vital to the future of our economy and that promoting financial literacy in particular must be a high priority."

Ben Bernanke
Chairman of the Federal Reserve System

Handout 5.1: Payday Decisions

- **Gross pay** – The amount earned per pay period before any deductions or taxes are subtracted.
- **Net pay** – The amount received after all deductions or taxes have been subtracted from a paycheck.
- **Disposable income** – The amount of money a person has available to save or spend.



Handout 5.2: Figure it Out

Michelle, Juan, Sasha and Bob each have $2,500 in net pay each month. They have each analyzed the amount of late fees, overdraft fees and over-the-credit-limit fees they have been charged for the current month, as listed in the chart. Complete the last two columns of the chart.

Chart A: Monthly Record of Fees						
	Net Pay	Late Fees	Overdraft Fees	Over-the-Credit-Limit Fees	Total Amount of Fees	Disposable Income Minus Fees
Michelle	$2,500	$50	$35	$35		
Juan	$2,500	$50	$35	$0		
Sasha	$2,500	$27	$70	$0		
Bob	$2,500	$25	$35	$0		

If Michelle, Juan, Sasha and Bob each continue to pay the same amount of late fees, overdraft fees and over-the-credit-limit fees each month as given in Chart A above, how much will they each pay for an entire year? Calculate the total amount of fees they will pay for an entire year and the effects on their annual disposable income. Fill in the amounts on Chart B below.

Chart B: Annual Record of Fees						
	Net Pay	Late Fees	Overdraft Fees	Over-the-Credit-Limit Fees	Total Amount of Fees	Disposable Income Minus Fees
Michelle	$30,000					
Juan	$30,000					
Sasha	$30,000					
Bob	$30,000					

Handout 5.2: Figure it Out—Answer Key

Michelle, Juan, Sasha and Bob each have $2,500 in net pay each month. They have each analyzed the amount of late fees, overdraft fees and over-the-credit-limit fees they have been charged for the current month, as listed in the chart. Complete the last two columns of the chart.

Chart A: Monthly Record of Fees						
	Net Pay	Late Fees	Overdraft Fees	Over-the-Credit-Limit Fees	Total Amount of Fees	Disposable Income Minus Fees
Michelle	$2,500	$50	$35	$35	*$120*	*$2,380*
Juan	$2,500	$50	$35	$0	*$85*	*$2,415*
Sasha	$2,500	$27	$70	$0	*$97*	*$2,403*
Bob	$2,500	$25	$35	$0	*$60*	*$2,440*

If Michelle, Juan, Sasha and Bob each continue to pay the same amount of late fees, overdraft fees and over-the-credit-limit fees each month as given in Chart A above, how much will they each pay for an entire year? Calculate the total amount of fees they will pay for an entire year and the effects on their annual disposable income. Fill in the amounts on Chart B below.

Chart B: Annual Record of Fees						
	Net Pay	Late Fees	Overdraft Fees	Over-the-Credit-Limit Fees	Total Amount of Fees	Disposable Income Minus Fees
Michelle	$30,000	*$600*	*$420*	*$420*	*$1,440*	*$28,560*
Juan	$30,000	*$600*	*$420*	*$0*	*$1,020*	*$28,980*
Sasha	$30,000	*$324*	*$840*	*$0*	*$1,164*	*$28,836*
Bob	$30,000	*$300*	*$420*	*$0*	*$720*	*$29,280*

Handout 5.3: Figuring for Michelle

If Michelle continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on her total disposable income over time. Complete the chart below.

Length of Time	Total Amount of Net Pay for Time Period	Total Amount of Fees Charged for Time Period	Total Disposable Income Minus Amount Charged for Fees
1 year	$30,000		
5 years			
10 years			
20 years			

Michelle has decided to take actions to avoid any further monthly fees. Rather than paying fees, she will deposit an amount equal to what she was charged in fees in a savings account each month. She has found a savings account that pays 5 percent interest compounded monthly. If Michelle makes no withdrawals from this savings account, determine the amount of Michelle's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:

www.math.com/students/calculators/source/compound.htm

Amount to Deposit in Savings Each Month	Savings After One Year	Savings After Five Years	Savings After 10 Years	Savings After 20 years

If Michelle continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

Length of Time	Total Net Pay for Time Period	Total Deposited to Savings Account for Time Period	Total Disposable Income Minus Amount Deposited to Savings Account	Total Disposable Income After Adding Savings Plus Interest
1 year	$30,000			
5 years				
10 years				
20 years				

Handout 5.3: Figuring for Michelle—Answer Key

If Michelle continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on her total disposable income over time. Complete the chart below.

Length of Time	Total Amount of Net Pay for Time Period	Total Amount of Fees Charged for Time Period	Total Disposable Income Minus Amount Charged for Fees
1 year	$30,000	*$1,440*	*$28,560*
5 years	*$150,000*	*$7,200*	*$142,800*
10 years	*$300,000*	*$14,400*	*$285,600*
20 years	*$600,000*	*$28,800*	*$571,200*

Michelle has decided to take actions to avoid any further monthly fees. Rather than paying fees, she will deposit an amount equal to what she was charged in fees in a savings account each month. She has found a savings account that pays 5 percent interest compounded monthly. If Michelle makes no withdrawals from this savings account, determine the amount of Michelle's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:

www.math.com/students/calculators/source/compound.htm

Amount to Deposit in Savings Each Month	Savings After One Year	Savings After Five Years	Savings After 10 Years	Savings After 20 years
$120	*$1,473*	*$8,161*	*$18,634*	*$49,324*

If Michelle continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

Length of Time	Total Net Pay for Time Period	Total Deposited to Savings Account for Time Period	Total Disposable Income Minus Amount Deposited to Savings Account	Total Disposable Income After Adding Savings Plus Interest
1 year	$30,000	*$1,440*	*$28,560*	*$30,033*
5 years	*$150,000*	*$7,200*	*$142,800*	*$150,961*
10 years	*$300,000*	*$14,400*	*$285,600*	*$304,234*
20 years	*$600,000*	*$28,800*	*$571,200*	*$620,524*

Handout 5.4: Figuring for Juan

If Juan continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on his total disposable income over time. Complete the chart below.

Length of Time	Total Amount of Net Pay for Time Period	Total Amount of Fees Charged for Time Period	Total Disposable Income Minus Amount Charged for Fees
1 year	$30,000		
5 years			
10 years			
20 years			

Juan has decided to take actions to avoid any further monthly fees. Rather than paying fees, he will deposit an amount equal to what he was charged in fees in a savings account each month. He has found a savings account that pays 5.5 percent interest compounded monthly. If Juan makes no withdrawals from this savings account, determine the amount of Juan's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:

www.math.com/students/calculators/source/compound.htm

Amount to Deposit in Savings Each Month	Savings After One Year	Savings After Five Years	Savings After 10 Years	Savings After 20 years

If Juan continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

Length of Time	Total Net Pay for Time Period	Total Deposited to Savings Account for Time Period	Total Disposable Income Minus Amount Deposited to Savings Account	Total Disposable Income After Adding Savings Plus Interest
1 year	$30,000			
5 years				
10 years				
20 years				

Handout 5.4: Figuring for Juan—Answer Key

If Juan continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on his total disposable income over time. Complete the chart below.

Length of Time	Total Amount of Net Pay for Time Period	Total Amount of Fees Charged for Time Period	Total Disposable Income Minus Amount Charged for Fees
1 year	$30,000	*$1,020*	*$28,980*
5 years	*$150,000*	*$5,100*	*$144,900*
10 years	*$300,000*	*$10,200*	*$289,800*
20 years	*$600,000*	*$20,400*	*$579,600*

Juan has decided to take actions to avoid any further monthly fees. Rather than paying fees, he will deposit an amount equal to what he was charged in fees in a savings account each month. He has found a savings account that pays 5.5 percent interest compounded monthly. If Juan makes no withdrawals from this savings account, determine the amount of Juan's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:

www.math.com/students/calculators/source/compound.htm

Amount to Deposit in Savings Each Month	Savings After One Year	Savings After Five Years	Savings After 10 Years	Savings After 20 years
$85	*$1,046*	*$5,855*	*$13,558*	*$37,028*

If Juan continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

Length of Time	Total Net Pay for Time Period	Total Deposited to Savings Account for Time Period	Total Disposable Income Minus Amount Deposited to Savings Account	Total Disposable Income After Adding Savings Plus Interest
1 year	$30,000	*$1,020*	*$28,980*	*$30,026*
5 years	*$150,000*	*$5,100*	*$144,900*	*$150,755*
10 years	*$300,000*	*$10,200*	*$289,800*	*$303,358*
20 years	*$600,000*	*$20,400*	*$579,600*	*$616,628*

Handout 5.5: Figuring for Sasha

If Sasha continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on her total disposable income over time. Complete the chart below.

Length of Time	Total Amount of Net Pay for Time Period	Total Amount of Fees Charged for Time Period	Total Disposable Income Minus Amount Charged for Fees
1 year	$30,000		
5 years			
10 years			
20 years			

Sasha has decided to take actions to avoid any further monthly fees. Rather than paying fees, she will deposit an amount equal to what she was charged in fees in a savings account each month. She has found a savings account that pays 6 percent interest compounded monthly. If Sasha makes no withdrawals from this savings account, determine the amount of Sasha's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:

www.math.com/students/calculators/source/compound.htm

Amount to Deposit in Savings Each Month	Savings After One Year	Savings After Five Years	Savings After 10 Years	Savings After 20 years

If Sasha continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

Length of Time	Total Net Pay for Time Period	Total Deposited to Savings Account for Time Period	Total Disposable Income Minus Amount Deposited to Savings Account	Total Disposable Income After Adding Savings Plus Interest
1 year	$30,000			
5 years				
10 years				
20 years				

Handout 5.5: Figuring for Sasha—Answer Key

If Sasha continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on her total disposable income over time. Complete the chart below.

Length of Time	Total Amount of Net Pay for Time Period	Total Amount of Fees Charged for Time Period	Total Disposable Income Minus Amount Charged for Fees
1 year	$30,000	*$1,164*	*$28,836*
5 years	*$150,000*	*$5,820*	*$144,180*
10 years	*$300,000*	*$11,640*	*$288,360*
20 years	*$600,000*	*$23,280*	*$576,720*

Sasha has decided to take actions to avoid any further monthly fees. Rather than paying fees, she will deposit an amount equal to what she was charged in fees in a savings account each month. She has found a savings account that pays 6 percent interest compounded monthly. If Sasha makes no withdrawals from this savings account, determine the amount of Sasha's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:

www.math.com/students/calculators/source/compound.htm

Amount to Deposit in Savings Each Month	Savings After One Year	Savings After Five Years	Savings After 10 Years	Savings After 20 years
$97	*$1,197*	*$6,768*	*$15,896*	*$44,818*

If Sasha continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

Length of Time	Total Net Pay for Time Period	Total Deposited to Savings Account for Time Period	Total Disposable Income Minus Amount Deposited to Savings Account	Total Disposable Income After Adding Savings Plus Interest
1 year	$30,000	*$1,164*	*$28,836*	*$30,033*
5 years	*$150,000*	*$5,820*	*$144,180*	*$150,948*
10 years	*$300,000*	*$11,640*	*$288,360*	*$304,256*
20 years	*$600,000*	*$23,280*	*$576,720*	*$621,538*

Handout 5.6: Figuring for Bob

If Bob continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on his total disposable income over time. Complete the chart below.

Length of Time	Total Amount of Net Pay for Time Period	Total Amount of Fees Charged for Time Period	Total Disposable Income Minus Amount Charged for Fees
1 year	$30,000		
5 years			
10 years			
20 years			

Bob has decided to take actions to avoid any further monthly fees. Rather than paying fees, he will deposit an amount equal to what he was charged in fees in a savings account each month. He has found a savings account that pays 4.5 percent interest compounded monthly. If Bob makes no withdrawals from this savings account, determine the amount of Bob's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:

www.math.com/students/calculators/source/compound.htm

Amount to Deposit in Savings Each Month	Savings After One Year	Savings After Five Years	Savings After 10 Years	Savings After 20 years

If Bob continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

Length of Time	Total Net Pay for Time Period	Total Deposited to Savings Account for Time Period	Total Disposable Income Minus Amount Deposited to Savings Account	Total Disposable Income After Adding Savings Plus Interest
1 year	$30,000			
5 years				
10 years				
20 years				

Handout 5.6: Figuring for Bob—Answer Key

If Bob continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on his total disposable income over time. Complete the chart below.

Length of Time	Total Amount of Net Pay for Time Period	Total Amount of Fees Charged for Time Period	Total Disposable Income Minus Amount Charged for Fees
1 year	$30,000	*$720*	*$29,280*
5 years	*$150,000*	*$3,600*	*$146,400*
10 years	*$300,000*	*$7,200*	*$292,800*
20 years	*$600,000*	*$14,400*	*$585,600*

Bob has decided to take actions to avoid any further monthly fees. Rather than paying fees, he will deposit an amount equal to what he was charged in fees in a savings account each month. He has found a savings account that pays 4.5 percent interest compounded monthly. If Bob makes no withdrawals from this savings account, determine the amount of Bob's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:

www.math.com/students/calculators/source/compound.htm

Amount to Deposit in Savings Each Month	Savings After One Year	Savings After Five Years	Savings After 10 Years	Savings After 20 years
$60	*$735*	*$4,029*	*$9,072*	*$23,287*

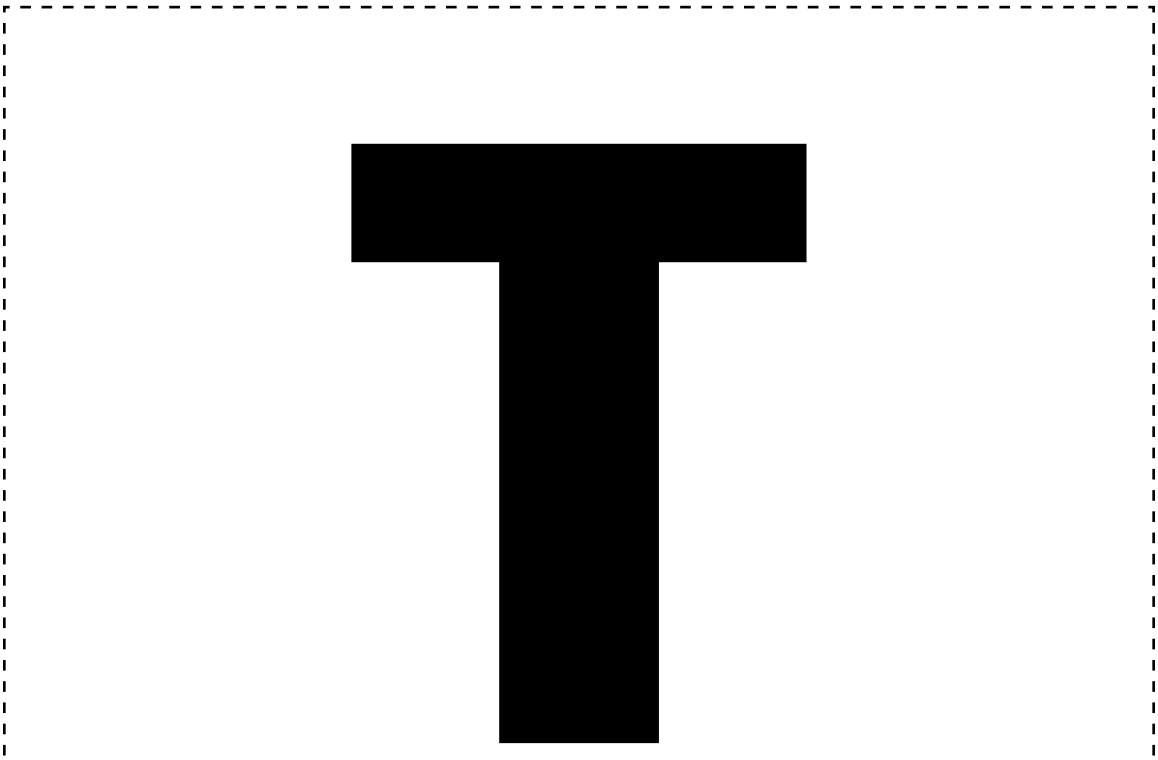
If Bob continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

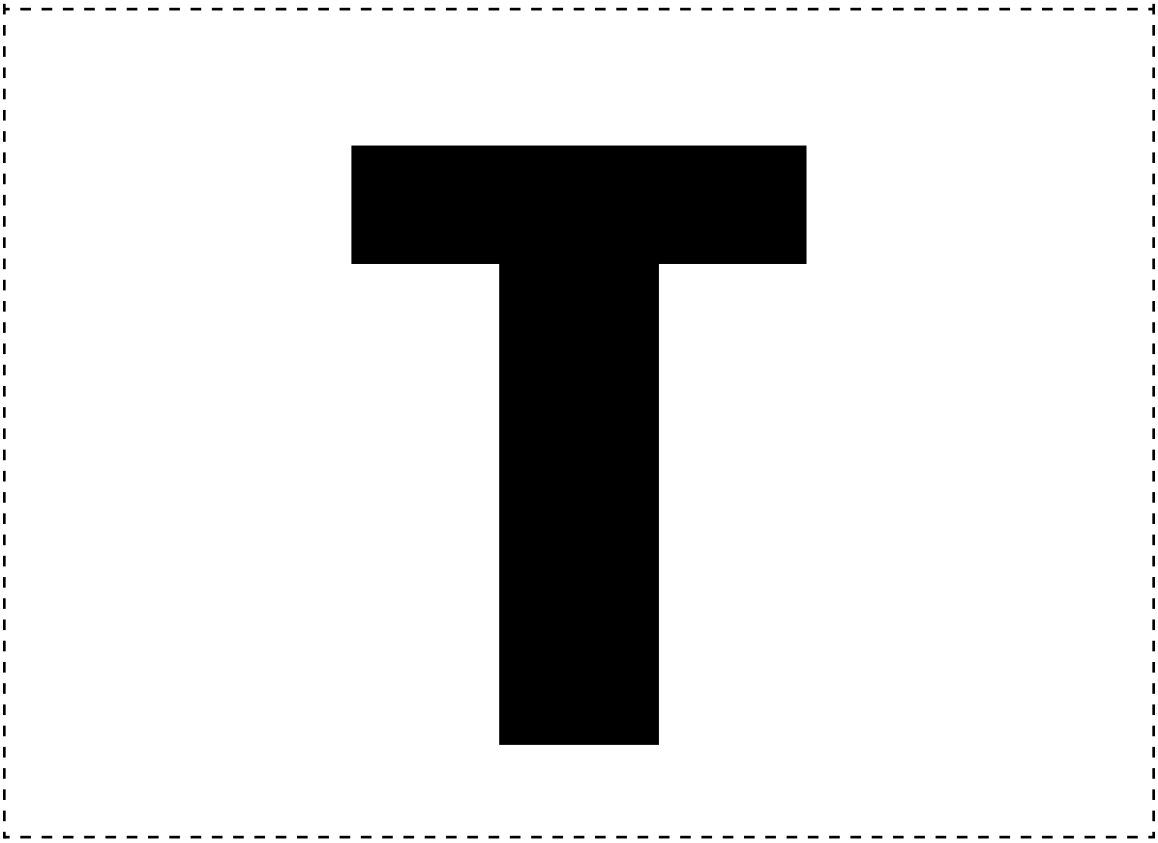
Length of Time	Total Net Pay for Time Period	Total Deposited to Savings Account for Time Period	Total Disposable Income Minus Amount Deposited to Savings Account	Total Disposable Income After Adding Savings Plus Interest
1 year	$30,000	*$720*	*$29,280*	*$30,015*
5 years	*$150,000*	*$3,600*	*$146,400*	*$150,429*
10 years	*$300,000*	*$7,200*	*$292,800*	*$301,872*
20 years	*$600,000*	*$14,400*	*$585,600*	*$608,887*

Handout 5.7: Keep the Currency Score Sheet

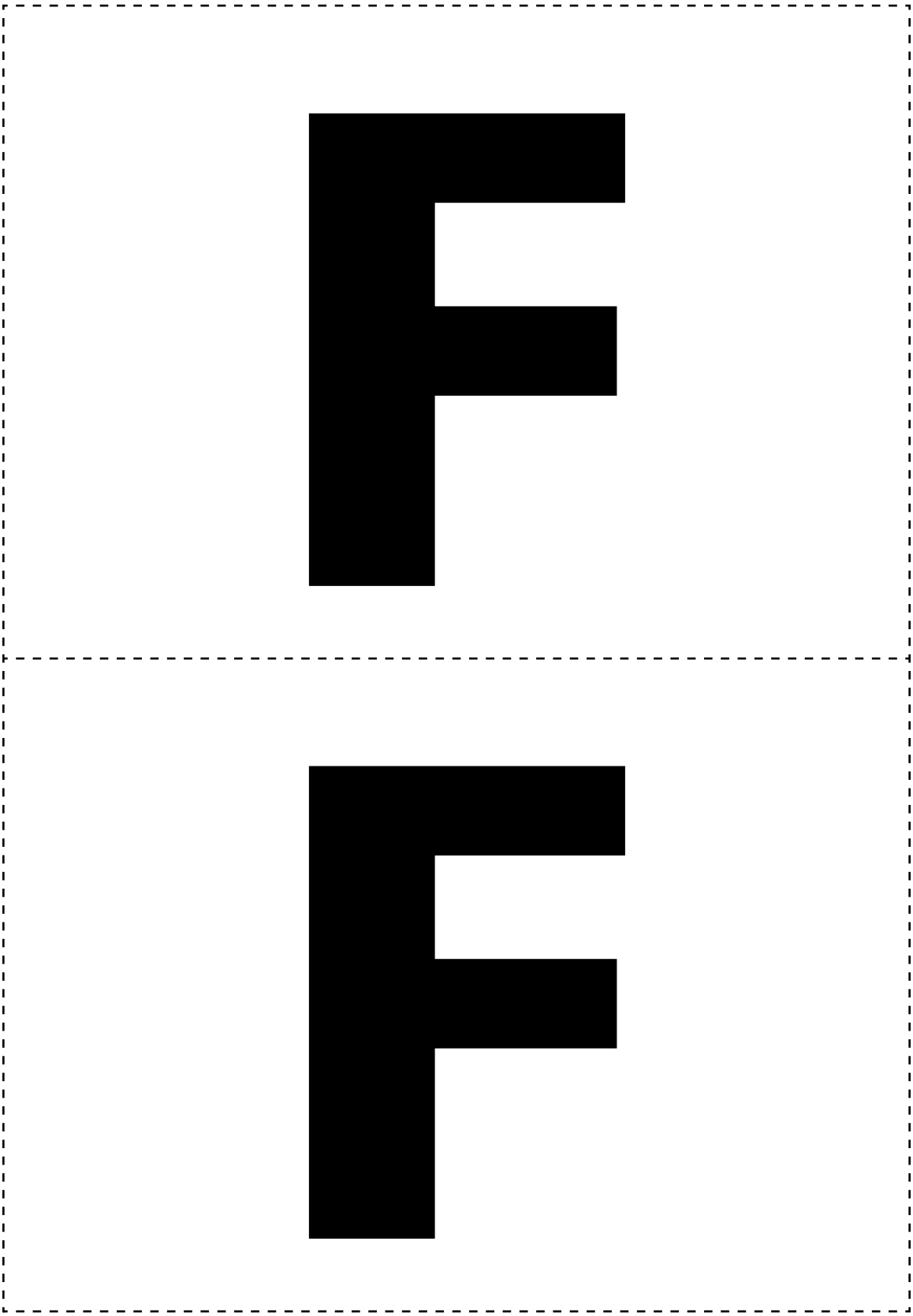
			Current Balance
		Starting Balance	$200
1.	Keep your currency!	Deduct $10	$
2.	Keep your currency!	Deduct $10	$
3.	Keep your currency!	Deduct $10	$
4.	Keep your currency!	Deduct $10	$
5.	Keep your currency!	Deduct $10	$
6.	Keep your currency!	Deduct $10	$
7.	Keep your currency!	Deduct $10	$
8.	Keep your currency!	Deduct $10	$
9.	Keep your currency!	Deduct $10	$
10.	Keep your currency!	Deduct $10	$
11.	Keep your currency!	Deduct $10	$
12.	Keep your currency!	Deduct $10	$
13.	Keep your currency!	Deduct $10	$
14.	Keep your currency!	Deduct $10	$
15.	Keep your currency!	Deduct $10	$
16.	Keep your currency!	Deduct $10	$
17.	Keep your currency!	Deduct $10	$
18.	Keep your currency!	Deduct $10	$
19.	Keep your currency!	Deduct $10	$
20.	Keep your currency!	Deduct $10	$
		Ending Balance	**$**

Handout 5.8: T Cards





Handout 5.9: F Cards



Handout 5.10: Keep the Currency Statements with Answers

1. APR means "a preferred rate" and is the annual interest rate for consumers with good credit. *(False – APR means "annual percentage rate" and applies to all customers, regardless of their credit history or rating.)*

2. A revolving line of credit means an unlimited number of purchases can be made up to a specific dollar amount. *(True – The dollar amount is determined by the credit card company based on a credit cardholder's credit history. The number of purchases is unlimited up to the dollar limit.)*

3. A lower interest rate can be obtained for credit cards if a consumer chooses to use collateral to secure the credit card loan. *(False – Credit cards are not collateralized.)*

4. When a car dealership offers different promotional offers and incentive programs, the best deal for the buyer is the one that offers the lowest interest rate. *(False – Promotional offers and incentive programs can differ and should be considered individually to determine which deal is best. The lowest interest rate is not always the best deal.)*

5. Beginning in 2010, if you have authorized the credit card company to allow transactions that will take you over your credit limit, the credit card company can impose only one fee per billing cycle. *(True – If you opt-in to allow transactions that take you over your credit limit, your credit card company can impose only one fee per billing cycle.)*

   SOURCE: www.federalreserve.gov/consumerinfo/wyntk_creditcardrules.htm

6. An ATM card is a "pay now" point-of-sale transaction that replaces cash and checks. *(False – An ATM card is not used to make purchases. It is used to access a computer that allows a bank customer to get cash, make deposits or transfer money between accounts. An ATM card allows bank customers to access their bank accounts.)*

7. Most overdraft charges on bank accounts occur because people write checks when they don't have enough money in their account to cover the checks. *(False – According to the Center for Responsible Lending, more and more banks are changing the way bank account overdrafts are handled. Most overdraft charges on bank accounts [46.3 percent] are caused by debit card purchases and ATM withdrawals.)*

   SOURCE: Center for Responsible Lending, by Julie Snider, *USA TODAY*, January 25, 2007.

8. Beginning in 2010, financial institutions must give consumers the choice as to whether the standard overdraft service will apply to debit card and ATM transactions. *(True – A consumer can choose to have this overdraft service.)*

   SOURCE: www.federalreserve.gov/consumerinfo/wyntk_overdraft.htm

9. The interest rates on debit cards are usually lower than on credit cards because there is less risk to the lender. *(False – A debit card does not have an interest rate. A debit card is a "pay now" point-of-sale transaction that replaces cash and checks. Transactions are deducted electronically from a cardholder's bank account or checking account.)*

10. Beginning in 2010, if you want an increase in your credit limit, are under age 21 and have a credit card with a cosigner, your cosigner must agree in writing to the increase. *(True – If you are under age 21 and have a card with a cosigner and want an increase in the credit limit, your cosigner must agree in writing to the increase.)*

    SOURCE: www.federalreserve.gov/consumerinfo/wyntk_creditcardrules.htm

11. A debit card is a secured loan with a revolving line of credit. (*False – A debit card is not a loan. Money for debit card transactions is deducted directly from the debit card holder's bank account.)*

12. "Caveat emptor" means consumers control the success of a business. *(False – This is a Latin phrase which means "Let the buyer beware." It is meant to serve as a warning to consumers to make careful purchasing decisions.)*

13. The interest rate on credit cards is often high because it is an unsecured loan and is quite risky for creditors. *(True – A credit card is an unsecured loan. This means that there is no collateral required. Collateral is property required and offered as a guarantee of payment on a loan. From the lender's perspective, an unsecured loan is quite risky. If the borrower were to default, there is nothing for the lender to claim for payment or partial payment. This means that the possibility that the borrower may not repay is very high. Therefore, the interest rate on credit cards is often high.)*

14. Beginning in 2010, the monthly credit card statements will include information on how long it will take you to pay off your balance if you only make minimum payments. *(True – Credit card companies are required to have this on statements.)*

    SOURCE: www.federalreserve.gov/consumerinfo/wynth_creditcardrules.htm

15. Most Americans have four credit cards in their wallets. *(True – This is according to a 2008 report.)*

    SOURCE: *Arkansas Democrat Gazette*, *Parade Magazine*, August 10, 2008, pp. 4-5, "Don't Get Clobbered by Credit Cards!" by Gary Weiss, www.parade.com/hot-topics/0808/dont-get-clobbered-by-credit cards

16. To avoid credit problems, making sure you can make the monthly payment is the most important factor to consider when purchasing a car. *(False – There are many factors to consider, including the interest rate, the length of the contract and the total price of the vehicle.)*

17. Consumers should record their transactions in a check register at the end of each month when they receive their bank statement in the mail. *(False – Consumers should record transactions as they occur to prevent overdrafts on a bank account.)*

18. It is more advantageous to use a debit card than a credit card because a debit card does not have interest, over-the-credit-limit fees and late fees. *(False – There are advantages and disadvantages to using both cards.)*

19. According to the Truth in Lending Act, the liability for unauthorized use of debit cards and credit cards is $50 if a debit card or credit card is lost or stolen. *(False – The Truth in Lending Act is a federal law that protects credit card holders against unauthorized use of their credit cards. Unlike credit cards, which cap your liability for unauthorized charges at $50, your liability for a debit card depends on the situation. If you notify the bank within two business days of discovering an unauthorized transaction, your maximum liability is $50. However, if you don't notify the bank until after those first two days, you could lose up to $500.)*

    SOURCE: www.fdic.gov/consumers/consumer/news/cnfall09

20. According to the Truth in Lending Act, all car loans issued on the same day by a dealership must have the same interest rate. *(False – This law mandates disclosure of information about the cost of credit. The interest rate charged on car contracts will vary from one consumer to another based on their credit report and credit history. Some consumers may be charged high interest rates because they are credit risks based on their past behavior.)*