

Lesson Plan

Text: Financial Algebra

Chapter: 4

Unit number 4-4 Title of unit: Credit Cards and Average Daily Balance

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Short Description (Be sure to include where in your unit this lesson takes place):

Discussion of what vocabulary student's need to know to use a credit card. Also, the differences between credit and debit cards will be discussed. This will be taught after loan calculations and regression and before looking at credit card statements. Computing the average daily balance.

LESSON PLAN

TEACHER: Teacher Prep/ Lesson Plan

- **Lesson Objectives (Students will be able to:)**

A working knowledge with basic vocabulary dealing with credit cards and debit cards
Compute an average daily balance

- **List of prerequisite skills needed:**

Basic consumer credit
Debtors and creditors
Credit Reporting Agencies
Information before taking out a loan
Loan Calculations and regression

- **Vocabulary:**

credit card—a type of account that has a revolving charge where the entire bill does not have to be paid in full

impulse buying—when a consumer purchases something to which they suddenly were attracted and had no intention of buying

revolving charge account—A type of credit card where the entire bill does not have to be paid in full each month; there is a minimum monthly payment and finance charge the month following any month in which the bill is not paid in full

charge card—a special type of credit card where the monthly bills for all purchases must be paid in full and there is no interest charged.

Truth-in-Lending Act—a law that offers protection if a credit card is lost or stolen; if a consumer contacts the credit card company immediately after losing a credit card or the card is stolen, the maximum liability is \$50.

Fair Debt Collection Practices Act—the law that prohibits the creditor from harassing or using unfair means to collect the amount owed.

Electronic Funds Transfer Act—the law that protects debit card users against unauthorized use of their cards; users are not responsible for purchases made with a lost or stolen card after the card is report missing.

mean—often referred to as average; the sum of all the numbers in a data set divided by the number of elements in the data set.

- **State Standards addressed: Math:** (Math)College Readiness Mathematics Standards
2.1 Summarize and interpret mathematical information which may be in oral and written formats
Reading: (Reading)
1.2.2 Apply strategies to comprehend words and ideas
Writing: (Writing)
2. the student writes in a variety of forks for different audiences and purposes
- **Teacher Preparation:** (*What materials and set-up are required for this lesson?*)
Copies of the two student sheets
One for vocabulary
One for math
textbook
- **Content Delivery:**
Students will work on their own through the first part of the lesson

Show Smartboard slide with Vocabulary words

Students pair-share after completing the first column of sheet 1 and have the students begin filling out column 2 of sheet 1

Show definitions from the balance of the Smartboard slides and discuss with students if they knew the answer. Have them fill out the third column in their own words and share with the entire class.

Introduce the concept of Average Daily Balance

Use the four examples from the textbook on page 195 and 196

Have the students pull up sheet 2 and fill it out with you on example 2, example 3, and example 4

Students then will complete questions 1-8 in the textbook

- **Instructional Documents**

Handouts Student Sheet 4-4-1 and Student Sheet 4-4-2

<http://wvde.state.wv.us/strategybank/KWLCharts.html>

Different varieties of KWL charts

<http://credit.about.com/od/creditcardbasics/qt/avgdailybalance.htm>

Basic computation for average daily balance including explanation

www.youtube.com/watch?v=Ji3wZb1SnsU

16-minute video describing the computation of the average daily balance for installment loans

- **Assessment Tool used in this Lesson**

Students will turn in their Sheet 2 and the completed problems from the Application section

- **Reinforcement/Intervention/Extension Activities**

To reinforce the average daily balance calculation—question 17 will be assigned. For extension—students who choose to continue will be asked to create one problem using their own data and have at least one other student answer it and turn it in.

- **Career Applications**

Students will be able to use this to check their own credit cards for accurate information.

This can be used by future accountants, bank tellers, and others in the financial field.

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	K	W	L
Word/Phrase	What I know!	What do I want to know?	What did I learn?
credit card			
impulse buying			
revolving charge account			
charge card			
Truth-in-Lending Act			
Fair Debt Collection Practices Act			
Electronic Funds Transfer Act			
Mean (mathematical)			

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K
What do I KNOW from the information stated in this problem?

N
What information do I NOT need in order to solve this problem?

W
WHAT exactly does this problem ask me to find?

S
What STRATEGY or operation will I use to solve this problem?

Solve the Problem:

K
What do I KNOW from the information stated in this problem?

N
What information do I NOT need in order to solve this problem?

W
WHAT exactly does this problem ask me to find?

S
What STRATEGY or operation will I use to solve this problem?

Solve the Problem:

K
What do I KNOW from the information stated in this problem?

N
What information do I NOT need in order to solve this problem?

W
WHAT exactly does this problem ask me to find?

S
What STRATEGY or operation will I use to solve this problem?

Solve the Problem:

Formative Assessment Vocabulary of Credit Cards

Circle T for true or F for False

- T F 1. One advantage of using a credit card is that people do not have to carry large sums of cash.
- T F 2. Impulse buying is when a consumer plans in advance to purchase a particular item.
- T F 3. There are two types of credit card accounts and the most common in use is the revolving charge account.
- T F 4. I didn't know my credit card was stolen until three days after it was gone. I found out that someone charged \$5,000 worth of car parts on my card. I was responsible for only 10% of the total.
- T F 5. You come to me and want a loan of \$15,000 to start a new business. It was a four- year loan with an APR of 9.77%. The finance charge for this loan is \$488.50.

6. Express the average daily balance algebraically given this set of daily balances.

x days @ y dollars

z days @ j dollars

Of the following types of balances, which one favors the cardholder more (according to most experts): Briefly define each and CIRCLE the correct response to the above question.

Adjusted Balance _____

Average daily balance _____

Previous balance _____

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Quiz Answers for Formative Assessment Vocabulary of Credit Cards

Circle T for true or F for False

- T F 1. One advantage of using a credit card is that people do not have to carry large sums of cash.
- T F 2. Impulse buying is when a consumer plans in advance to purchase a particular item.
- T F 3. There are two types of credit card accounts and the most common in use is the revolving charge account.
- T F 4. I didn't know my credit card was stolen until three days after it was gone. I found out that someone charged \$5,000 worth of car parts on my card. I was responsible for only 10% of the total.
- T F 5. You come to me and want a loan of \$15,000 to start a new business. It was a four- year loan with an APR of 9.77%. The finance charge for this loan is \$488.50.
6. Express the average daily balance algebraically given this set of daily balances.

$$\begin{array}{l} x \text{ days @ } y \text{ dollars} \quad w \text{ days @ } d \text{ dollars} \quad \frac{xy + wd + zj + vh}{x + w + z + v} \\ z \text{ days @ } j \text{ dollars} \quad v \text{ days @ } h \text{ dollars} \end{array}$$

Of the following types of balances, which one favors the cardholder more (according to most experts): Briefly define each and CIRCLE the correct response to the above question.

Adjusted Balance Most consumer experts say this method favors the cardholder takes the balance from your previous statement, adds new charges, subtracts the payment you made and then multiplies this number by the monthly interest rate.

Average daily balance Pretty even-handed one and the most commonly used The company tracks your balance day-by-day, adding charges and subtracting payments as they occur. At the end of the period, they compute the average of these daily totals and then multiply this number by the monthly interest rate to find your finance charge.

Previous balance This generally favors the card issuer, according to consumer experts. The issuer multiplies your previous statement's balance by the monthly interest rate to find the new finance charge. This means you're still being charged interest on your balance a whole period after you've paid it down!

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Washington

1. List the 8 steps to calculate the average daily balance using the credit calendar.

1.
2.
3.
4.
5.
6.
7.
8.

2. When is the best time during a billing cycle for a cardholder to make a payment so that the average daily balance would be less?

1. List the 8 steps to calculate the average daily balance using the credit calendar.

1. Draw a grid with 7 boxes across and 5 boxes down. Draw an arc in the lower right hand corner.
2. Check the billing cycle by looking on the statement. Shade in those last circles not used.
3. Enter the billing date on the last day on the calendar not shaded.
4. Put a plus sign and the charged amount on the calendar dates that have debits posted. Put a minus sign and the payment made on that calendar date.
5. Enter the previous balance on the first date. Fill in each date with same amount until a charge or payment has been made.
6. Add any purchases to that total or subtract any payments from that total.
7. Continue through the billing cycle until the last day.
8. To find the Average Daily Balance, add all the daily balances and divide by the number of days in the billing cycle.

2. When is the best time during a billing cycle for a cardholder to make a payment so that the average daily balance would be less? What result would that give?

The later in the billing cycle a person purchases something the lower the average daily balance. This results in a lower finance charge.

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