



ELECTIVE

STUDENT BOOK

▶ **Consumer Math | Unit 5**

1. CREDIT CARDS

For many people, credit cards are a wonderful convenience. There's no need to run to the bank to get cash before, for example, going out to eat at a restaurant. You can purchase gifts online and send them to friends and family. Credit cards really can make life easier! However, if you overuse a credit card, it can lead to debt and even get in the way of achieving financial goals. To avoid this, you need to understand how credit cards really work. In this section, you'll take a close look at credit cards.

Section Objectives

Review these objectives. When you have completed this section, you should be able to:

1. Define key financial terms associated with credit cards, including credit limit and grace period.
2. Calculate finance charges using different interest rates.
3. Understand information included on credit card statements.
4. Describe how making minimum payments on credit card balances increases the total cost and repayment time.
5. Compare credit cards with reference to fees, APR, grace period, and credit limit.

Vocabulary

Study these words to enhance your learning success in this section.

APR	cash advance	credit limit	debt
finance charges	grace peiod	minimum payment	periodic rate
previous balance	Truth in Lending Disclosure		

Note: All vocabulary words in this unit appear in **boldface** print the first time they are used. If you are unsure of the meaning when you are reading, study the definitions given.

CREDIT CARDS AND FINANCE CHARGES

Credit cards are a convenient way to borrow money. They allow you to make purchases at a store, over the phone, or online. Carrying a credit card with you means that you don't have to carry cash or checks. Credit cards also allow you to reserve rental cars and hotel rooms and may be required when paying for them. And, with a credit card, you can cover unexpected expenses, such as car repairs. However, if you don't use your credit cards wisely, these same cards can get you deeply into **debt**. In other words, you could end up owing a great deal of money to credit card companies. Many credit card companies charge high interest rates, and high interest rates make your purchases even more expensive. Let's look at just how expensive such purchases can get.



Calculating Finance Charges. Finance charges

are the interest and fees you pay for making purchases using a credit card. Something that originally cost \$1,000 at the store, for instance, could end up costing you twice as much over time. Wow! How can that happen? It's the finance charges. The finance charges you pay can add up if you don't pay the balance in full right away.

There are two interest rates with which you should be familiar. One is the **APR**, or annual percentage rate, and the other is the periodic interest rate. The APR is the annual percentage you're charged for borrowing money. Notice it's a yearly interest rate. However, credit card companies don't charge interest just once per year. Interest will be charged to your account every payment period, which is usually monthly. If you divide the APR by twelve (because there are twelve months in one year), you will get the periodic rate. So, the **periodic rate** is used to calculate the interest you pay in one payment period. For example, if the credit card has an APR of 18 percent, you can divide the 18 percent by 12 to calculate the periodic rate.

$$18\% / 12 = 1.5\%$$

So, you'd be charged 1.5 percent on the money you borrow for one payment period.

Let's look at an example using this APR and periodic rate. Alex received his credit card bill but didn't pay the entire balance. Therefore, he has a remaining balance of \$1,000. The APR on his credit card is 18 percent. Since we already divided 18 percent by 12, we know the periodic rate is 1.5 percent. To calculate the interest he pays this month, multiply 1.5 percent by \$1,000 (the balance).

$$1.5\% \times \$1,000 = \$15$$

That's right. Alex will pay \$15 in interest for this month. In fact, he'll pay 1.5 percent of the balance next month, too, if he doesn't pay off his credit card in full. You can see how debt can add up quickly. For each month you don't pay off your credit card, interest is charged on the remaining amount owed.

Let's look at one more example. Maya has a remaining balance of \$563 on her credit card. Her credit card company has an APR of 15 percent. How much will Maya pay in interest for one month?

$$15\% / 12 = 1.25\%$$

$$1.25\% \times \$563 = \$7.0375$$

The credit card company will round off to the nearest cent, and Maya will pay \$7.04 in interest for just one month.

FOR MORE INFORMATION

Try using a credit card calculator online. Conduct an internet search for "credit card calculator." Try different amounts in the calculator to calculate how much you would pay in interest.

EXAMPLE

Mark received his credit card statement, and he couldn't afford to pay the full balance of \$1,565. He sent the minimum balance, which was \$31.30 (2 percent of \$1,565). Now the credit card company is charging interest on the amount that remains on the credit card. How much remains on his credit card?

$$\mathbf{\$1,565 - \$31.30 = \$1,533.70}$$

After sending \$31.30, Mark now has a balance of \$1,533.70 on his credit card. This credit card company charges a periodic rate of 1.5 percent. How much interest will he pay?

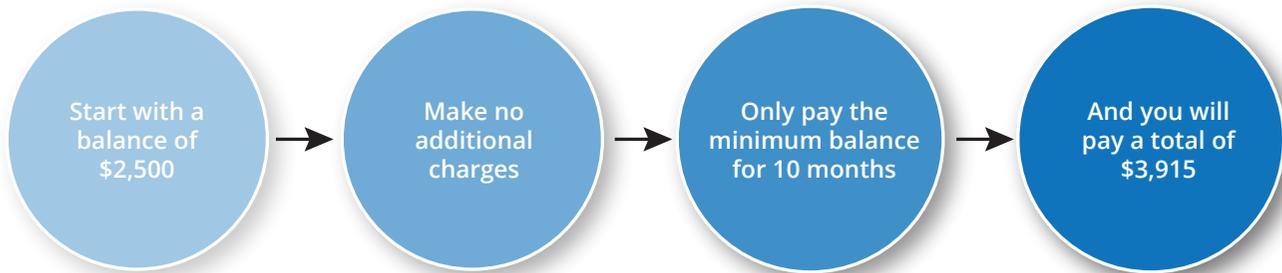
$$\mathbf{\$1,533.70 \times 1.5\% = \$23.01}$$

He will pay \$23.01 in interest. Add this to the remaining balance to find his new balance.

$$\mathbf{\$1,533.70 + \$23.01 = \$1,556.71}$$

So, Mark's balance next month will not be \$1,533.70. It will be \$1,556.71, assuming he doesn't use the credit card to purchase more items.

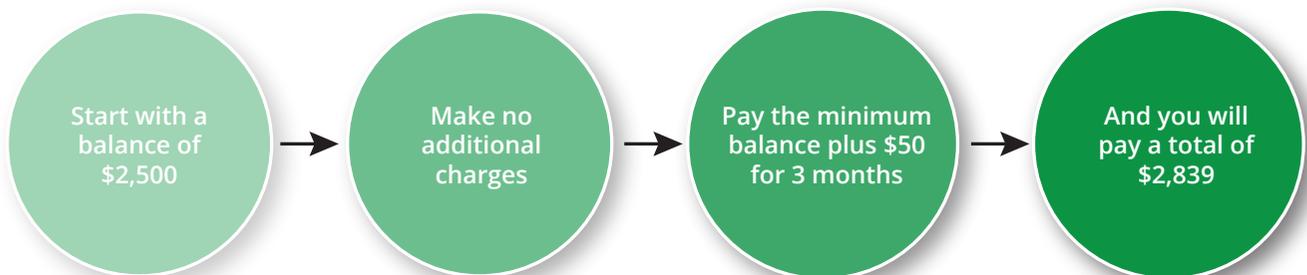
WARNING! If you make only the minimum payment each period, you will pay more interest and it will take you longer to pay off your balance. Let's walk through an example that highlights this. Note the APR used for this example is 18 percent, and the minimum payment is 4 percent.



If you start with a balance of \$2,500, make no additional charges, and only pay the minimum balance for ten months, the total amount paid will be \$3,915.

Did you notice that the purchases that originally cost \$2,500, now cost \$3,915? Those purchases became much more expensive! It also took longer to pay off the balance. The longer you have a balance, the more interest you pay.

Paying more than the minimum payment can make a big difference. Let's say you start with the same balance of \$2,500, but this time you pay the minimum payment plus \$50.



- » **previous balance**
- » new balance
- » minimum payment due
- » total credit limit
- » credit available
- » payment website and mailing address

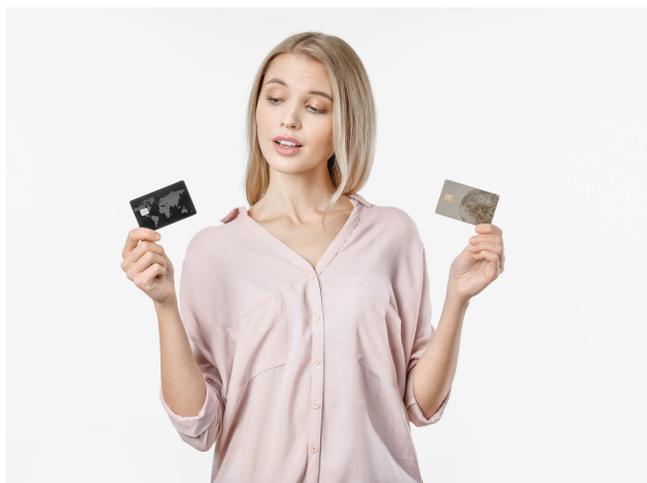
SELECTING THE RIGHT CREDIT CARD

Before you sign up for a new credit card, make sure you understand the terms. Credit cards may look alike, but they don't work alike. Some of today's major credit card companies include Visa, MasterCard, Discover, and Capital One. These cards allow you to make purchases up to a certain limit. This limit is called your **credit limit**. For example, when you sign up for your first credit card, they may assign you a credit limit of \$500 or \$1,000. Later, when you're making more money and have a good credit history, your credit limit may be as high as \$10,000 or more.

There are other types of cards, as well. There are charge cards, travel cards, and entertainment cards. Some of these require you to pay the entire balance each month. Some of them have no preset credit limit. Others charge high annual fees. And some of these cards may block the use of your credit card if you're late with a payment. It's a good idea to read carefully about the terms of the credit card. In fact, each credit card company is required to provide a **Truth in Lending Disclosure**, which is a statement that explains their terms.

What should you look for in the terms? It's important to look at the APR. Remember, the APR is the cost of borrowing money, expressed as a yearly rate. Even if you plan to always pay your full balance, it's still a good idea to look for a low APR. You'll also want to look at fees. Here's a list of common fees that a credit card company may charge:

- » **Annual fee:** Some companies charge annual fees of \$20, \$50, or more for just carrying their credit cards.
- » **Balance transfer fee:** If you transfer your balance to another credit card account, you might be charged this fee.
- » **Cash advance fee:** When you get cash using your credit card at an ATM or with a bank teller, it is called a **cash advance**. You are usually charged a transaction fee for this. In addition, a cash advance is also charged higher interest rates than regular purchases, and the interest could begin accruing immediately.
- » **Late fee:** If your payment is received after the due date, a late fee will be charged.
- » **Over-the-limit fee:** If your balance increases to an amount that is more than your credit limit, an over-the-limit fee is applied.



In addition to APR and fees, you'll also want to consider the **grace period**. The grace period is the period of time before the credit card company starts charging interest. The grace period varies depending on the credit card company but is typically about twenty-one days. In other words, if you have a twenty-one-day grace period and if you pay your balance within that time, you won't pay interest. However, if you don't pay the entire balance during one grace period, there's often no grace period on new purchases.

Grace period lengths can range among credit cards—all the way to 55 days for some companies—and some credit cards have grace period exceptions. For example, some credit cards do not include a grace period for cash advances. In these cases, the interest would begin accruing immediately. So, it's important to look at the grace period and whether it still applies for cash advances and on new purchases.

Finally, there's one more factor you should look at when selecting a credit card. It's the credit limit the credit card company will offer you. One credit card company may offer you a credit limit of \$1,000, while another credit card company will offer you a credit limit of \$2,000. This information will not appear in a Truth and Lending Disclosure but will appear in a separate document.

In summary, when selecting a credit card, you should read the Truth and Lending Disclosure carefully and consider the APR, fees, and grace period. You should also consider the credit limit they offer you. Some of these factors may be more important to you than others. For example, if you are starting a small business out of your home and you need to buy supplies, the credit limit may be most important. However, if you think you will have a balance on your credit card sometimes, the APR will be most important. On the other hand, if you are good at paying your balance each month, the APR would not be as important, but you would want to look for a credit card with low fees.

Complete these activities.

- 1.12** A grace period is the _____ .
- period before a late fee is charged
 - period before interest starts
 - period interest is earned
- 1.13** _____ is the most important factor to consider if you plan to carry a credit card balance.
- APR
 - Late fee
 - Over-the-limit fee

**CHECK**_____
Teacher_____
Date

SELF TEST 1

Write the letter of the vocabulary word that matches the correct definition (each answer, 3 points).

- | | | | |
|------|--|---|--------------------------------|
| 1.01 | | yearly interest rate a credit card company charges to borrow money | a. periodic rate |
| | | least amount that must be paid each month on a credit card | b. debt |
| | | time before the credit card company starts charging interest | c. credit limit |
| | | amount owed at the end of the previous billing period | d. cash advance |
| | | amount of money owed to a bank, credit card company, or other | e. APR |
| | | statement federal law requires credit cards to provide to explain terms | f. grace period |
| | | cash borrowed from a credit card account, has fees and high interest rate | g. minimum payment |
| | | interest and fees charged for making purchases with a credit card | h. previous balance |
| | | interest rate charged for one payment period | i. Truth in Lending Disclosure |
| | | maximum amount of money authorized to be used on a credit card | j. finance charges |

Write **T** for True or **F** for False (each answer, 3 points).

- | | | |
|-------|--|--|
| 1.011 | | Credit card debt will be quickly paid off if minimum payments are made each month. |
| | | Subprime lenders make high-interest loans to borrowers who have low credit scores. |
| | | The interest and fees you pay for making purchases using a credit card are finance charges. |
| | | Interest on credit cards is charged quarterly. |
| | | If you pay the entire credit card balance each statement period, you won't pay any interest. |
| | | APR is the Annual Percentage Return. |
| | | Divide the APR by 12 and you'll have your periodic rate. |
| | | An annual fee is a charge some credit card companies require to have a credit card. |
| | | There are no fees for paying a credit card payment after the due date. |
| | | Credit cards charge an over-the-limit fee if your balance is more than your credit limit. |



List five things a credit card statement will show (each answer, 2 points).

1.021 _____

1.022 _____

1.023 _____

1.024 _____

1.025 _____

Circle the correct answer (each answer, 3 points).

1.026 The interest rate you are charged on a credit card for one payment period is the _____ .

- a. periodic rate
- b. APR
- c. finance charges

1.027 The terms of a credit card, including the APR, grace period, and fees, can be found in a _____ .

- a. credit report
- b. brochure
- c. Truth in Lending Disclosure

1.028 Tyler’s credit card has an APR of 24 percent. What is the periodic rate for this credit card?

- a. 24 percent
- b. 12 percent
- c. 2 percent

1.029 Mario has a remaining balance of \$1,300 on his credit card. His credit card has an APR of 20 percent. How much will he pay in interest in one month?

- a. \$21.67
- b. \$20.00
- c. \$16.00

1.030 Eva is transferring her credit card balance from one card to another. What is the most important factor Eva should consider when selecting a new credit card?

- a. late fee
- b. APR
- c. credit limit

TIPS FOR RAISING YOUR CREDIT SCORE

First and foremost, it's important to be responsible with your credit, using strategies like creating and following a budget, being a smart consumer, and making credit card and other loan payments on time. But there are additional strategies that can be used to raise your credit score.

The U.S. government's Federal Reserve Board recommends the following five tips for improving your credit score:

1. Get copies of your credit report, and then make sure the information is correct.
2. Pay your bills on time.
3. Understand how your credit score is determined.
4. Learn the legal steps you must take to improve your credit report.
5. Beware of credit-repair scams.

We have discussed tips one and two, but let's look at how your credit score is determined in greater detail. Paying your bills on time to avoid any negative reporting is the first step. A low debt-to-income ratio, which is the ratio of your total monthly payments to installment and credit card loans to your monthly income, is also important. The best practice is keeping your debt-to-income ratio under 30 percent to maintain or improve your credit score. You'll learn more about debt-to-income ratio calculations in Section 3.

In addition to your overall debt-to-income ratio, the ratio of individual credit card balances to credit card limits matters. Credit cards with balances that are at or close to the limit of your maximum credit limit can also hurt your credit score. For example, if many of your credit cards have \$500 limits and your balances are \$450 to \$500, that lowers your credit score even if your overall debt-to-income ratio is still under 30 percent. A general rule of thumb is to at least keep your credit card balance below one-third of their credit limit.

For example, if you have a \$500 credit card limit, multiply the limit by .30 to find the amount. For a \$500 credit card limit, keeping the balance below \$150 will improve your credit.

The length of your credit history also impacts your credit score. Your credit history will be short when you are young, since you are just starting to build credit. Establishing credit with a small first credit card is one way to start your credit history. An auto loan is another way. Some auto lenders will not provide loans to people without a credit history, so a cosigner on the loan may be necessary. A small credit card and affordable auto loan would start credit history and give you two types of credit accounts on your credit report.

While credit history length can help your credit score, the amount and types of credit accounts can have a positive or negative effect. Most of the credit-scoring models used by the bureaus consider a mix of installment loans and credit cards a good thing. But too many installment loans or credit cards can hurt your score. And every time you apply for credit, an inquiry is reported to your credit report. Too many inquiries can lower your credit score.

Limiting the number of installment loans and credit cards, and not applying for loans or credit for long periods to limit inquiries will help improve your credit score.

The U.S. government's Federal Trade Commission website (ftc.gov) has many resources for consumers, including the legal steps that must be taken



to improve your credit report. Visit the site to learn more about building good credit and to access free resources, including a link to a website jointly operated by Experian, Equifax, and TransUnion where you can get a free copy of your credit reports from each bureau once a year.

There are many credit-repair scams to beware of and many of them look legitimate. If something looks quick and easy, it's likely a scam. Fixing bad credit is a long process and there's no quick fix. The Federal Trade Commission website has a page committed to debt relief service and credit repair scams, which includes links to current scam cases, press releases, blog posts, and more. You will learn more about the steps to fix a credit report error in Section 3.

To sum it up, here are some steps to take to grow and improve your credit score:

- » Get free copies of your credit reports from all three bureaus each year to monitor your credit.
- » Pay your bills on time.
- » Keep your debt-to-income ratio low.
- » Keep credit card balances below 30 percent of the total credit limit.
- » Responsibly begin applying for credit to build your report history.
- » Keep a limited mix of credit card and installment loans.
- » Limit the number of inquiries on your credit by going long periods without applying for credit.
- » Research and learn about other ways credit scores are determined and how to fix credit report errors.
- » Beware of scams that promise quick fixes or easy debt relief.

Write T for True or F for False.

- 2.22** _____ As long as your debt-to-income ratio is below 30 percent, it does not matter how high your credit card balances are.
- 2.23** _____ Inquiries reported to your credit report each time you apply for credit do not impact your score.
- 2.24** _____ There are three credit bureaus.
- 2.25** _____ A responsible mix of installment loans and credit cards can improve your credit score.
- 2.26** _____ There are credit repair companies that can offer fast solutions to repair bad credit.
- 2.27** _____ The Federal Trade Commission website has resources and information on credit and debt relief.
- 2.28** _____ Keeping your credit card balances below 30 percent of the total credit limit helps improve your score.



804 N. 2nd Ave. E.
Rock Rapids, IA 51246-1759
800-622-3070
www.aop.com

EL2305 - Nov 2023 Printing



9 780740 342769