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About This Book

Personal finance is part knowledge and part skill — and the *Building Your Future* book series gives you a foundation in both. It addresses knowledge by covering essential financial principles for establishing a foundation in Book 1, paving the road to success in Book 2, expanding responsibilities in Book 3, and accumulating wealth in Book 4. The series also addresses the mathematical skills that you need to live a financially healthy life. You will be able to see the real-world consequences of mastering your finances, which should help you understand the relevance of good mathematical skills. We hope you enjoy this *Building Your Future* book series.

## About The Actuarial Foundation

The Actuarial Foundation is a 501(c)(3) nonprofit organization. The mission of The Actuarial Foundation is to enhance math education and financial literacy through the talents and resources of actuaries. Please visit the Foundation's website at www.actuarialfoundation.org for additional educational materials.



Please Note: If you are reading this book in PDF on a computer, you can click on **highlighted links** to access online resources. You can also mouseover **bolded terms** for a pop-up definition. Definitions for all bolded terms can also be found in the glossary at the back of the book. You will need a calculator to complete the activitles, which all provide spaces for you to type in your answers.

It is possible that some of the online resource links provided here may be renamed or removed by their hosts in the future. A quick internet search should lead you to similar online resources that you can use to complete the activities.

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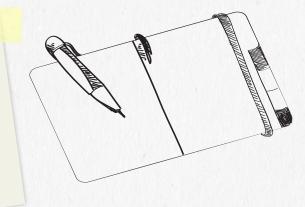
### What is an Actuary?

Actuaries are the leading professionals in finding ways to manage risk. It takes a combination of strong math and analytical skills, business knowledge, and understanding of human behavior to design and manage programs that control risk. US News and World Report, the Jobs Rated Almanac, CNN Money, and others all agree: few other occupations offer the combination of benefits that an actuarial career can offer. To learn more about the profession, go to www.BeAnActuary.org.









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## (HAPTER I: Begin with a Budget

### **Did You Know?**

The average American family spends 33% of the household budget on housing. Transportation is the second most costly item at 15.8% of the budget, while food holds third place at 12.7%, but personal insurance/retirement saving is a close runner-up, at 11.9%.<sup>1</sup>

As you probably know, a **budget** is an itemized list of income and expenses over a given period of time. It allows you to plan how you will spend your money and is a critical tool for setting and reaching financial goals.

As you move into adulthood, your financial responsibilities are likely to increase, making your budget more complex – and more important. You will find yourself budgeting for **needs** like rent or a mortgage, utilities (such as electric power), insurance, and retirement. At the same time, your **wants** will likely take up more of your budget as your income increases.

To see how complex a household budget can be, take a look at this example. Some key items to notice:

- Income: This person earns \$4,000 per month. As a student, your earnings are probably only hundreds per month. Which budget do you think is easier to plan and manage? Why?
- Home and Living Expenses: These add up to nearly half of this person's monthly income. Do you think that's an appropriate percentage?
- Financial Obligations: Listing long-term and retirement savings goals as financial obligations provides a monthly reminder that setting aside money for the future is not just an option — it is vital for financial security.
- *Cash short/extra*: Even though it's listed last, this is an important item. By budgeting some extra money each month, you can build a cushion for unexpected expenditures and any overspending.

Budgeting is the foundation of financial management. Making a budget, and keeping track of how well you stay within your budget, is the best way to make sure you meet your financial responsibilities and achieve your financial goals all through life.

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MONTHLY HOUSEHOLD BUDGET	Need or Want?	Amount Budgeted	% of Income
INCOME			
Net pay		\$4,000.00	100.00%
EXPENSES			
HOME & LIVING	1111		
Mortgage/rent		\$1,000.00	25.00%
Utilities (electricity, etc.)		\$250.00	6.25%
Cellphone		\$80.00	2.00%
Cable TV		\$90.00	2.25%
Internet		\$50.00	1.25%
Groceries		\$240.00	6.00%
Dining out		\$200.00	5.00%
Total Home & Living Expenses		\$1,910.00	47.75%
TRANSPORTATION			
Car payment		\$250.00	6.25%
Gas/fuel		\$100.00	2.50%
Car insurance		\$80.00	2.00%
Repairs & maintenance		\$50.00	1.25%
Parking		\$60.00	1.50%
Total Transportation Expenses		\$540.00	13.50%
FINANCIAL OBLIGATIONS			
Long-term savings		\$100.00	2.50%
Retirement (401 k, Roth IRA)		\$200.00	5.00%
Credit card payments		\$150.00	3.75%
Student loans		\$80.00	2.00%
Total Financial Obligations		\$530.00	13.25%
ENTERTAINMENT			
Music service		\$40.00	1.00%
Movies		\$50.00	1.25%
Sporting events/concerts		\$100.00	2.50%
Other activities		\$50.00	1.25%
Total Entertainment Expenses		\$240.00	6.00%
HEALTH		¢2 10.00	0.0070
Health insurance		\$150.00	3.75%
Medication, vitamins, etc.		\$40.00	1.00%
Life insurance		\$20.00	0.50%
Total Health Expenses		\$210.00	5.25%
PERSONAL CARE		φ210.00	5.2570
New clothing		\$100.00	2.50%
Laundry, dry cleaning		\$100.00	1.00%
Salon/barber			
Hair product, cosmetics, etc.		\$60.00 \$20.00	1.50%
		\$20.00	5.50%
Total Personal Expenses		φ220.00	5.50%
MISCELLANEOUS		\$50.00	1 050/
Charitable donations		\$50.00	1.25%
Gifts		\$50.00	1.25%
Other		\$50.00	1.25%
Total Miscellaneous Expenses		\$150.00	3.75%
TOTAL EXPENSES		\$3,800.00	95.00%
Cash short/extra		\$200.00	5.00%

<sup>1</sup> www.bls.gov/news.release/pdf/cesmy.pdf

### **Saving for Emergencies**

The key to successful budgeting lies in making sure you do not spend more than you earn. But unexpected expenses occur. Your car might break down or you might become ill. If your budget is tight, and you have not put money aside to cover these sorts of events, then it can be very easy to get off budget and incur unwanted costs and debt.

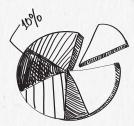
Experts recommend keeping enough money to cover 6-12 months' worth of monthly expenses in an emergency longterm savings account (like the one listed under Financial Obligations in the example budget). This is the potential amount of time it would take to find a new job, but the money can also b Emergency saving spending and sho Certificate of Deposit (CD): a savings account issued by a bank that has a fixed maturity date and interest rate based on this timeline; money can be accessed in an emergency, but fees are typically charged for early withdrawal

ies. your hat is

accessible within a days and ideally earns interest, like a **Certificate of Deposit (CD)** account. Investing in stocks or other market-dependent funds is not recommended, because you can't risk losing some of your savings. Once you've built up your emergency savings, you can begin another account for short-term savings items like car repairs, home improvements, and vacations.



### Activity 1 BALANCING ACT



Learning to balance needs and wants can take time and practice.

#### PART 1

Review this sample budget and fill in the column labeled "Need or Want?" with N's and W's. Then answer the questions below.

 What percentage of this person's budget is going to needs? To wants?

Needs: \_\_\_\_\_% Wants: \_\_\_\_\_%

 Based on this budget, approximately how much should this person have set aside in an emergency long-term savings account?

By depositing \$100 per month into long-term savings, how long will it take to build up that amount (excluding interest)?

- 3. How much could this person go over budget each month and still not use up all their income?
  - What is the benefit of having this kind of "extra" money in a budget?

#### PART 2

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\$

Now step into the future and put together your own monthly budget using the template on the next page. Some major expenses are already filled in, but you can decide how much to spend on the other budget items. You can use the sample budget to estimate expenses for individual items, or research typical expenses for yourself.

As you create your budget, assume the following:

- You have an annual salary of \$36,000 net pay (after taxes).
- Your budget must cover all your monthly expenses.
- You should deposit 5% of your income each month into a long-term savings account.
- You should have some extra money at the end of each month to help cover any overspending.

### SAMPLE BUDGET

JAMIEC DARACI			
MONTHLY HOUSEHOLD BUDGET	Need or Want?	Amount Budgeted	% of Income
INCOME			
Net pay		\$4,000.00	100.00%
EXPENSES			
HOME & LIVING			
Mortgage/rent		\$1,000.00	25.00%
Utilities (electricity, etc.)		\$250.00	6.25%
Cellphone		\$80.00	2.00%
Cable TV		\$90.00	2.25%
Internet		\$50.00	1.25%
Groceries		\$240.00	6.00%
Dining out		\$200.00	5.00%
Total Home & Living Expenses		\$1,910.00	47.75%
TRANSPORTATION			
Car payment		\$250.00	6.25%
Gas/fuel		\$100.00	2.50%
Car insurance		\$80.00	2.00%
Repairs & maintenance		\$50.00	1.25%
Parking		\$60.00	1.50%
Total Transportation Expenses		\$540.00	13.50%
FINANCIAL OBLIGATIONS			
Long-term savings		\$100.00	2.50%
Retirement (401 k, Roth IRA)		\$200.00	5.00%
Credit card payments		\$150.00	3.75%
Student loans		\$80.00	2.00%
Total Financial Obligations		\$530.00	13.25%
ENTERTAINMENT		\$550.00	10.2370
Music service		\$40.00	1.00%
Movies		\$50.00	1.25%
Sporting events/concerts		\$100.00	2.50%
Other activities		\$100.00	1.25%
Total Entertainment Expenses		\$240.00	6.00%
HEALTH		\$240.00	0.00%
		¢150.00	2 759/
Health insurance Medication, vitamins, etc.		\$150.00 \$40.00	3.75%
Life insurance			1.00%
		\$20.00	0.50%
Total Health Expenses PERSONAL CARE		\$210.00	5.25%
		¢100.00	2.50%
New clothing		\$100.00	2.50%
Laundry, dry cleaning		\$40.00	1.00%
Salon/barber		\$60.00	1.50%
Hair product, cosmetics, etc.		\$20.00	0.50%
Total Personal Expenses		\$220.00	5.50%
MISCELLANEOUS	-	A	
Charitable donations		\$50.00	1.25%
Gifts		\$50.00	1.25%
Other		\$50.00	1.25%
Total Miscellaneous Expenses		\$150.00	3.75%
TOTAL EXPENSES		\$3,800.00	95.00%
Cash short/extra		\$200.00	5.00%

After you complete your budget, answer the questions below.

1. What is the difference between annual and monthly income in your budget and the sample budget?

Annual income difference: \$\_\_\_\_

Monthly income difference: \$\_\_\_\_\_

2. What formulas did you use to calculate monthly income and monthly long-term savings?

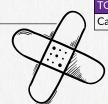
Monthly income: \_\_\_\_\_

Monthly savings: \_\_\_\_\_

- 3. How does the percentage of income allocated for needs and wants in your budget differ from the percentage in the sample budget? Why?
- 4. Where did you reduce expenses or cut an expense entirely to keep your budget under your monthly income? How did you make those choices?
- 5. Were you able to incorporate 5% savings into your budget? If yes, how did you do it? If no, why did you make that decision?
- 6. Suppose you are in a car accident and need to pay a \$500 insurance deductible to repair your car, plus \$1,000 in medical bills from injuries you sustained in the accident. In addition, you miss 2 weeks of work because of your injuries, resulting in the loss of pay during that time, since you don't have any paid time off remaining for the year. All totaled, this equals one month's income. Review your budget carefully and decide where you can realistically make the cuts necessary to pay for your car repairs and medical bills and make up for lost wages over the course of one year. Use this space to explain your choices.

BUDGET TEMPLATE		
MONTHLY HOUSEHOLD BUDGET	Amount Budgeted	% of Income
INCOME		
Net pay	\$	100.00%
EXPENSES		
HOME & LIVING		
Mortgage/rent	\$1,000.00	33.3%
Utilities (electricity, etc.)	\$250.00	8.3%
Cellphone	\$	0.0 %
Cable TV	\$	0.0 %
Internet	\$ \$	0.0 %
Groceries	\$	0.0 %
Dining out	\$	0.0 %
Total Home & Living Expenses	\$ 1,250.00	41.7 %
TRANSPORTATION		
Car payment	\$250.00	8.3%
Gas/fuel	\$	0.0 %
Car insurance	\$80.00	2.7%
Repairs & maintenance	\$	0.0 %
Parking	\$	0.0 %
Total Transportation Expenses	\$ 330.00	11.0 %
FINANCIAL OBLIGATIONS		
Long-term savings	\$	0.0 %
Retirement (401 k, Roth IRA)	\$	0.0 %
Credit card payments	\$	0.0 %
Student loans	\$200.00	6.7%
Total Financial Obligations	\$ 200.00	6.7 %
ENTERTAINMENT	+ 200.00	
Music service	\$	0.0 %
Movies	\$	0.0 %
Sporting events/concerts	\$	0.0 %
Other activities	\$	0.0 %
Total Entertainment Expenses	\$ 0.00	0.0 %
HEALTH	÷ 0.00	0.0 %
Health insurance	\$	0.0 %
Medication, vitamins, etc.	\$	0.0 %
Life insurance	\$150.00	5%
Total Health Expenses	\$ 150.00	5.0 %
PERSONAL CARE	÷ 150.00	0.0 /0
New clothing	\$	0.0 %
Laundry, dry cleaning	\$	0.0 %
Salon/barber	\$	0.0 %
Hair product, cosmetics, etc.	\$	0.0 %
Total Personal Expenses	\$ 0.00	0.0 %
MISCELLANEOUS	φ 0.00	0.0 %
Charitable donations	\$	0.0 %
Gifts	\$	0.0 %
	\$	
Other		0.0 %
Total Miscellaneous Expenses	\$ 0.00	0.0 %
TOTAL EXPENSES	\$ 1,930.00	64.3 %
Cash short/extra	\$ 1,070.00	35.7 %

RI/DGET TEMPLATE



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## (HAPTER 2: Loans and Debt

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### **Did You Know?**

The average **FICO** credit score in the U.S. is 700, which is considered good, but 46% of Americans may not check their score at least once a year, which can be risky.<sup>2</sup>

### Credit Scores and Reports

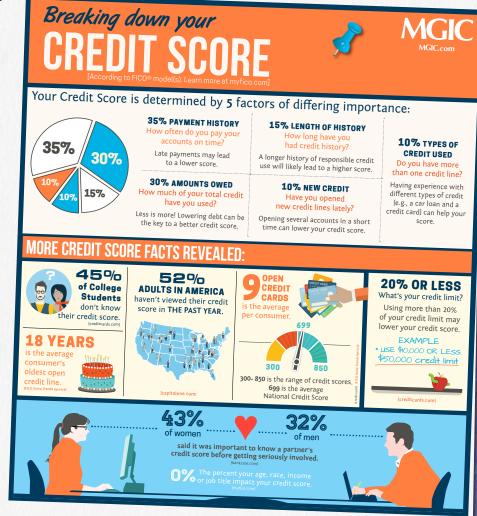
As you probably know, most service providers and lenders allow customers a set amount of time to pay their bills. When you receive your billing notice, or **statement**, a due date or pay-by date is typically included on the bill. In addition, the bill will include an explanation of the fees you will be charged if the payment for the bill is late. Sometimes these fees are a set amount (\$25.00 or more in some cases), while other times they are a percentage of the amount due. In either case, the end result of a late bill payment is a higher cost to you.

But there can be long-term consequences too. Late bill payments may be recorded in your **credit history**, which can lower your **credit ratin** and thus reduce your ability to get loans and credit in the future.

When you apply for a **loan**, such as a mortgage or credit card, or sign up for services like cable television, lenders need to estimate how likely you are to pay your bills on time. To help them, there are three major **credit bureaus** that collect data about the loans and credit cards you already have, what your balances are on each card, and a detailed history of all the monthly payments you've made over the last several years.

This information is all pulled together in a **credit report** along with a corresponding **FICO score**, which is like a test grade on a scale from 300 to 850. A high score

<sup>2</sup> www.fico.com/en/blogs/risk-compliance/us-average-fico-score-hits-700-a-milestone-for-consumers/ and https://nfcc.org/wp-content/uploads/2016/04/NFCC\_BECU\_2016-FLS\_datasheet-with-key-findings\_041516.pdf Infographic source: https://mgic-connects.com/mortgage-infographics/breaking-down-your-credit-score/



indicates that you have a history of paying your bills on time, that you do not have access to more credit than you can afford to pay, and that you do not pose a great risk of failing to repay the money you borrow. Typical guidelines for credit scores are as follows:

FICO SCORE	RATING
Below 579	Poor
580-669	Fair
670-739	Good
740-799	Very Good
800-850	Exceptional

**CHAPTER 2: Loans and Debt** 

Lenders will also ask for evidence of your income, to make sure you have enough money to repay your debt. All this information is used to determine whether or not you are approved for a loan, the amount of the loan, the interest rate you will pay, and other terms of the loan, such as a required **down payment**, which contribute to its overall cost. Not surprisingly, the better your credit rating is, the easier it is to get a lowinterest rate loan for major purchases such as cars and homes.

### **Credit History**

Having too much debt or missing payments can lower your credit score, but if you don't have any credit history at all, it's hard for lenders to know whether or not you will be responsible about paying them back. Thus, it is important that you build a positive credit history by maintaining at least one credit account, in good standing, for at least six months. This can be a revolving credit card that you use for small purchases and pay off every month, or an installment loan, like a car or student loan, where you pay the same amount each month over a set period of time. Students can build credit through a secured credit card, which requires an upfront deposit, or by becoming an authorized user on a parent's card.

Consumers are entitled to one free copy of their credit report every twelve months from each of the three credit bureaus. These can be obtained at **www.annualcreditreport. com.** You may also pay to receive monthly updates. While this can be costly, it is a good way to protect yourself from adverse affects of **identity theft**.



### **Identity Theft Is On the Rise**

With billions of dollars lost through identity theft every year, it is important to know how to prevent it and repair your credit history if you are a victim.

One of the most important things you can do to prevent identity theft is to check your credit reports at least once a year. This will allow you to review any accounts that have been opened or closed in your name, and any changes to personal information such as your address. Be sure to report it to the credit bureau immediately if you see something that is incorrect.

Taking simple, common sense precautions when handling important personal information such as Social Security numbers, banking data, and credit card information will help you protect your identity. Be careful where and how you share this information: never give this information out over the phone, via text, social media, or messaging app, or write it in an email. Don't store it on your computer without special encryption software, like a password protection program. If you use a smartphone for banking or making purchases, keep your phone secured with a strong password, fingerprint or facial recognition software. Some phones will also allow you to delete their contents remotely if the device is stolen.

Over the past few years, we've heard numerous accounts of social media and news sites and even large employers having their databases accessed by hackers. It's a good idea to maintain a separate email address for banking and shopping from the one you use for social media and news. Make sure your passwords vary and change them frequently.

If you are a victim of identity theft, it is important that you contact your bank and all other financial institutions immediately and let them know what has happened. You should also review your transaction records for fraudulent purchases. Finally, it is imperative that you contact one of the three major credit bureaus to make them aware of the identity theft. (If you contact one agency, they are required to report it to the other two). Working with the credit bureaus and financial institutions, you can repair any damage that has been done, but it is a long, time-consuming process.

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# Interest Rates and Selecting a Lender



Interest rates are set partly by the economy and partly by your creditworthiness. They can be **fixed** or **variable**. Fixed interest rates stay the same from month to month, which means that you pay the same amount every month. Variable interest rates change based on the financial market, so the amount of interest you pay can go up and down from month to month. This means that your total monthly loan payment can go up or down, as well.

Interest rates are only one factor to consider when applying for a loan. Some other important factors are loan fees charged to the borrower for processing and completing the loan, and repayment terms on the loan, such as penalties for early repayment.

You should always research all these factors when selecting a lender. Luckily, we have the **Truth in Lending Act** to help us. This is federal legislation designed to make sure consumers understand a loan's interest rate and terms,

### How Loans and Interest Affect You as a Consumer and Taxpayer

Companies throughout the world borrow substantial amounts of money. The interest rates determine how much these loans will cost them each year. The costs of these loans, in turn, are folded into the cost of the goods they manufacture (along with the price of materials and labor, etc.), and ultimately passed on to the consumer in the purchase price. When you think about how many different companies are involved in the manufacture and sale of even simple household items, like clothing, and then you imagine that each of them may be paying interest on loans, you can see how interest rates can have a big impact on day-to-day life.

Countries, states, cities, and towns also borrow substantial amounts of money. The interest rates they pay on their loans affect the amount of taxes they have to raise and the amount they have available to spend on programs like education and defense.

Of all of the practices in finance and investments, the practice of charging or paying interest is probably the most important, with a major impact on world affairs. Since interest rates change little from day to day, and often quite a lot from year to year, there are many people who spend a great deal of their time monitoring interest rates.

including any processing fees they might be charged upfront. It requires lenders to show both the interest rate and the **Annual Percentage Rate (APR)** for a loan. This latter rate represents the actual yearly cost of the loan, including any upfront fees. A \$5,000 loan with a 5% annual interest rate that charges no upfront fees would have an APR of 5%. A \$5,000 loan with a 5% annual interest rate that charges \$500 in upfront fees would have an APR of 5.5%. The APR makes it easier to compare loan offerings when you are selecting a lender.

It is also important to select a reliable lender, such as a bank or credit union. Beware of loans from **loan sharks**, which are not regulated, and be aware that companies that offer **payday loans** tend to lend small amounts of money (\$500 or less) and charge very high interest rates. Regulations for payday loans vary from state to state. These loans are really just cash advances against the next paycheck you will receive from your employer, and can be very costly.



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### **Activity 1 DEBT AND CREDIT** PART 1



Imagine that you need \$700 to go on a school-sponsored trip in early September. You have \$400 in savings and ask a classmate to lend you the extra \$300. Your classmate will consider lending you the money, but wants to make sure you will pay it back, so he asks you to provide the following information:

- How much money do you earn per week, and how much of that money is already budgeted to other expenses?
- Can you show evidence that you are responsible about paying your bills and debts? For example, have you ever borrowed money before? How quickly did you pay it back? Have you ever made a late payment?
- Are you currently attempting to borrow money from anyone else?

The following chart describes three scenarios for this situation. Mark the items listed for each scenario with a + or a - to indicate whether they would positively or negatively affect your classmate's decision to lend you the money. Mark an x for items that you think are neutral. Then answer the questions below.



## SCENARIO A

- \_\_\_You have a part-time job that pays \$160 per week.
- Your current expenses are a phone bill of \$20 per month and car insurance that is \$60 per month.
- Last year, you borrowed \$75 from your cousin and repaid it within 2 months.
- \_Two years ago, you missed a payment on your phone bill, but caught up and have paid all of your other bills on time for the past 3 years.

## SCENARIO B

- You have a part-time job that pays \$160 per week.
- Your current expenses are a phone bill and car insurance that total \$120 per month, plus a credit card with a \$2,000 balance.
- Last year you borrowed \$75 from your cousin and took 6 months to pay it back.
- You typically pay your bills on time, but were more than 30 days late paying your phone bill last month.

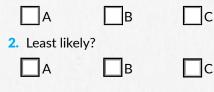
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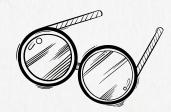
- \_\_\_You have a part-time job that pays \$160 per week.
- \_\_You have no current expenses.
- \_\_You have no record of having borrowed money or repaid it.



**1.** In which scenario do you think your classmate would be most likely to lend you the money?

C





#### PART 2

Let's assume that you fit the profile for scenario A. Your classmate decides to lend you the money under the following terms:

- You have until the end of the year to repay the loan.
- Your interest rate is 2% per month.
- Interest is charged at the beginning of each month before payments are credited.

You think the interest rate is high, but it encourages you to pay your classmate back in a timely manner. The chart above shows your monthly payments.

- 1. How much will you have to pay in December in order to repay the loan in full? \$\_\_\_
- 2. What was the total amount of money you had to pay your classmate by the time you repaid the loan? How much of that was interest?

Total Paid: \$\_\_\_\_\_Total Interest: \$\_\_\_\_\_

**3.** How would the cost of this loan be different if interest were calculated at the end of each month, after the month's payments had been credited?

#### PART 3

Now, suppose that, instead of paying as much as you can each month, you decide to pay off the loan in four equal monthly installments. Use the online loan calculator at **tools.finra.org/loan** to find out whether this is a good decision.

The loan calculator asks for an annual interest rate. At 2% per month, what is the annual interest rate for your loan?

MONTH

SEPT.

OCT.

NOV.

DEC.

- 2. According to the calculator, what is your monthly payment? \$\_\_\_\_\_
- 3. What is the total amount you will pay? \$\_\_\_\_\_ How much of that is interest: \$\_\_\_\_\_
- 4. Is this a good decision compared to paying as much as you can each month? Why or why not?

#### PART 4

Let's give the situation one more twist. Your classmate tells you that the interest rate will increase by one percentage point each month. Fill in this chart with the same monthly payments shown in the chart for Part 2. Then answer these questions.

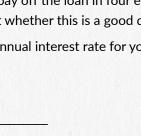
- How much will you have to pay in December in order to repay the loan in full? \$\_\_\_\_\_
- 2. What is the total amount of money you will pay to your classmate when you have repaid the loan? How much of that is interest?

Total amount paid: \$\_\_\_\_\_Total interest: \$\_\_\_\_\_

**3.** How does changing the interest rate each month change the total amount you have to pay over the life of the loan?



MONTH	BEGINNING BALANCE	TOTAL MONTHLY PAYMENT	MONTHLY INTEREST PAYMENT	ENDING BALANCE
SEPT.	\$300.00	\$60.00	\$6.00	\$246.00
ОСТ.	\$246.00	\$160.00	\$4.92	\$90.92
NOV.	\$90.92	\$80.00	\$1.82	\$12.74
DEC.	\$12.74		\$0.25	\$0.00



TOTAL

MONTHLY

PAYMENT

\$

\$

\$

\$

MONTHLY

INTEREST

RATE

2%

3%

4%

5%

BEGINNING

BALANCE

\$300.00

\$246.00

\$93.38

\$17.12

MONTHLY

**INTEREST** 

PAYMENT

\$

\$

\$

\$

ENDING

BALANCE

\$

\$

\$

\$

**CHAPTER 2: Loans and Debt** 

### Loaded Down

Even though most people take on the responsibility of loans with the best of intentions, all too often, people get buried in large amounts of debt that they can't afford to pay back. This can include mortgages, auto loans, financing with stores for large purchases, and credit card balances with high interest rates. When this happens, it is extremely important to communicate with the creditor as soon as possible to discuss your situation, before missed or late payments build up on your credit report.

Rohma

FINAL NO

There are a number of avenues consumers can take to get back on track. If you are carrying balances on credit cards with high interest rates, you may be able to negotiate a better interest rate. In some circumstances, you may be able to **refinance** a car or home loan. Sometimes when there is an emergency, like the loss of a job or a death in the family, lenders may be willing to give you a **grace period** for making reduced payments until you are back on your feet.

One common way to cope with credit card debt is with a **balance transfer** – credit card companies will often offer to let you transfer your debt from one card to another. You will pay an initial fee, and then, for a short period of time, you won't have to pay interest. After that introductory period is over, you will pay a predetermined rate on the remainder of the balance.

When debt gets really overwhelming, consumers may turn to **credit counseling** to help them sort out their budget, provide money management advice, and set a plan for paying off debts. Credit counseling agencies are typically non-profit organizations, and their job is to help consumers manage their debt. **Debt settlement** companies, on the other hand, are for-profit companies that seek to renegotiate debt with your lenders and service providers on your behalf. They charge fees and could get you into more debt than you started with. It is best to try and work with your lenders directly to negotiate better terms.

**Bankruptcy** is a last resort after all other options have been exhausted. This is a legal proceeding in which consumers declare in court that they don't have the resources to pay their debts. If the case is successful, the consumer will use their current assets to pay what they can, and the remainder of the debt will essentially be erased. While this may sound like a great deal, filing bankruptcy can take up to six months and remains on your credit report for as long as 10 years.

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### Activity 2 MANAGING DEBT **PART 1: WEIGHING YOUR OPTIONS**

Imagine that you have two credit cards: Card A has an APR of 19.99% and a balance of \$5,000. Card B has an APR of 8.99% and a balance of \$7,000. You decide to set aside \$800 per month to pay down the debt on both cards. What is the best way to allocate your monthly payments? Find out by answering the questions below, using this online credit card payoff calculator: www.creditcards.com/calculators/payoff.

### OPTION 1

- If you pay \$400 per month on each card, how long will it take to pay them both off? \_\_\_\_\_\_ months
- How much interest would you pay in total? Interest on Card A \$ \_\_\_\_\_\_ + Interest on Card B: \$ \_\_\_\_\_\_ = Total Interest: \$ 0.00 \_\_\_\_\_

### **oPTION 2**

Let's say that the minimum payment for each card is \$100. You decide to pay off one card at a time, while only making the minimum payment on the other. When the first card is paid off, you will put all of your monthly payments towards paying off the second. Which card should you pay off first? Use this chart and the online calculator to help you work out the math:

	PAY OFF CARD A FIRST	PAY OFF CARD B FIRST
How many months will it take to pay off the first card, if you pay \$700/month?		
How much interest will you have paid on the first card?	\$	\$
What will the balance on the second card be at that time, if you've continued to pay \$100 a month? (Assume interest is compounded monthly.)	\$	\$
How much interest will you have paid on the second card?	\$	\$
How many more months will it take to pay off the second card at that point?		
How much additional interest will you have paid?	\$	\$
TOTAL MONTHS:	0	0
TOTAL INTEREST:	\$ 0.00	\$ 0.00

Which card would you pay off first and why?

## OPTION 3

Now suppose that you receive a balance transfer offer from another credit card company that you can use to pay off both of your current credit cards. The terms are:

- Transfer fee of 3% or \$25 for each transfer, whichever is higher
- No interest for 9 months
- After that, an annual interest rate of 9.99%
- 1. What would the transfer fee be for each card? Card A: \$\_\_\_\_\_ Card B: \$\_\_\_\_\_
- 2. What would be the balance on this new card if you transfer the balances from both of your current cards plus the combined transfer fees? New balance: \$
- 3. If you continue to pay \$800 per month toward paying off your credit card debt, how long would it take to pay off this new card? Remember that you will pay no interest for the first 9 months. \_\_\_\_\_\_ months
- What is the total amount you would pay in interest and fees? \$\_\_\_\_\_\_
- 5. Comparing these three options, which do you think is the most financially responsible plan of action? Why?

#### PART 2: LOAN CONSOLIDATION

Now imagine that you have two loans, in addition to the credit card debt described in Part 1. You pay \$320 per month toward an auto loan, which has a current balance of \$15,000 and an interest rate of 7%. You also pay \$100 per month toward a furniture purchase that you financed at an interest rate of 1.9%, which has an unpaid balance of \$1,000.

- 1. What is your total debt, including credit card debt? \$\_\_\_\_\_
- What are your total monthly debt payments, assuming that you chose Option 1 above to manage your credit card debt?
   \$\_\_\_\_\_\_
- If your net monthly income is \$4,000, what percentage of this income is going toward monthly debt payments?

You apply for a consolidation loan to help pay off your debt. The new loan, for \$28,000, has an annual interest rate of 6% and your new monthly payment is \$350. Answer the questions below using the loan consolidation calculator at www.bankrate.com/calculators/credit-cards/credit-card-loan-consolidation-calculator.aspx.

- 4. How long will it take you to pay off the loan?
- 5. What is the total amount you will pay on the loan, including principal and interest? \$\_\_\_\_\_

6. How much less will you spend each month on debt payments? \$\_\_\_\_\_

- 7. Assume that you put this extra money each month into a retirement fund earning 5% interest per year. What is your investment worth by the time you pay off the loan? Use the calculator at www.investor.gov/additional-resources/ free-financial-planning-tools/compound-interest-calculator to find out \$\_\_\_\_\_
- 8. Was the consolidation loan a smart financial decision? Why or why not?

**CHAPTER 2: Loans and Debt** 

## (HAPTER 3: Purchasing a (ar

### **Did You Know?**

Consumers in the United States spend an average of \$8,427 per year on their vehicles, including purchase price, gasoline, insurance, maintenance, and licensing.<sup>1</sup>

There are many factors to consider when purchasing or leasing a car. Most people don't have enough cash on hand to buy a new vehicle outright, so they must obtain a loan. Because it is a significant expenditure, they must carefully evaluate and compare the many different financing options available in order to select the most cost-effective solution for their particular situation.

### **Determining Affordability**

When buying a car, one of the first decisions you must make is whether to purchase a new or used (pre-owned) vehicle. There are advantages to each, so you need to weigh your own priorities against what you can reasonably afford:

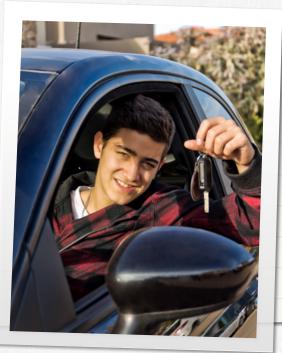
- New cars offer the latest in technology and features, typically have a longer-term warranty, and will need fewer repairs. However, they cost more than used cars, and lose value as soon as they leave the dealer's lot.
- Used cars typically lack some newer technology and features, have limited items covered by warranty, and may need more frequent repairs. In addition, a used car might have been damaged by a previous owner. The dealership can give you a report that shows the car's accident and repair history, collected by a company called Carfax. Some newer used cars were previously leased, and thus have fairly low mileage and have been regularly serviced by the manufacturer's repair shops. This makes them an attractive choice for many people.



Whatever car you decide on, you will need to make a **down payment**. If you have an old car that you need to get rid of, you can trade it in with the dealer to reduce your down payment. While the used car is not worth as much as it was when it was new, it still has some value. The dealer will assign it a **trade-in value**, which is based on its age, model, and condition. Alternatively, you could sell your used car, typically earning a higher price than what the dealer will offer, but with more work. The resale price, or **book value**, can be found through various sources, such as Kelley Blue Book at **kbb.com or Edmunds.com**.

Next, you should consider any **incentives** being offered by the dealership. These can include discounts, credits, reduced interest rates, or reduced down payment requirements. Because they can significantly reduce your overall costs, you must carefully evaluate and compare each potential deal.

Finally, consider the "hidden" costs of car ownership. The loan and monthly payments are only part of the cost — you will also need to pay for insurance, maintenance, repairs, taxes, and licensing, gasoline, and parking. These expenses can add up to thousands of dollars each year, so you should include them in your calculations when deciding what you can realistically afford.



### **Career Link**

Car owners are required to carry liability insurance. This insurance is an important factor in determining a vehicle's overall operating cost. In addition, many lenders require collision and comprehensive insurance coverage as a condition of receiving a loan to purchase a car. Actuaries develop car insurance pricing plans to help encourage careful driving. They determine how to adjust car insurance prices to reflect various kinds of risk factors.

<sup>1</sup> www.bls.gov/opub/ted/2017/consumer-spending-on-vehicles-averaged-8427-in-2016.htm

### Leasing vs. Purchasing

If you've decided it's time for a new car, you'll also need to decide whether you want to **lease** or **purchase** it. There are several differences between these options in areas such as ownership, maintenance, payments, and more. The chart below presents some pros and cons of each.

LEASE		💅 PURCHASE/FINANCE	
PROS	CONS	PROS	CONS
<ul> <li>Usually little or no down payment required</li> <li>Fewer up-front, out-of- pocket fees (e.g., sales tax)</li> <li>Lower monthly payments</li> <li>New car every few years</li> <li>No chance of being "upside down," or owing more on the car loan than the car is worth</li> <li>Allows you to have a more expensive car</li> <li>Some dealers will cover regular maintenance</li> <li>Tax advantages if used for a business</li> </ul>	<ul> <li>You always have a car payment</li> <li>You never own the car/ have an asset</li> <li>Mileage restrictions (usually 12,000-15,000 per year) and fees for overages (usually 15-25 cents per mile)</li> <li>Higher insurance coverage costs</li> <li>Charges for excess wear and tear</li> <li>Higher credit score requirements</li> <li>Depending on your state, you must be at least 18 to lease a car</li> </ul>	<ul> <li>You own the car after you make all the payments (usually 48-60 payments)</li> <li>Can own the car for as long as you want</li> <li>Can drive as many miles as you want</li> <li>Insurance costs are usually lower</li> </ul>	<ul> <li>Down payment required</li> <li>Up-front, out-of-pocket costs (e.g., sales tax)</li> <li>Higher monthly payments</li> <li>Can end up "upside down, or owing more on the car loan than the car is worth</li> <li>May have to pay for vehicle maintenance</li> </ul>



### **Activity 1 AUTO LOANS AND LEASES**

Most of us will need to purchase a car at some point in our lives, and the options presented to us can be confusing. Practice making the most financially savvy choice by reading each of the scenarios below and answering the questions.

#### PART 1: AUTO LOAN BASICS

Suppose you are buying a new car that costs \$20,000. You have a four-year-old vehicle, with a trade-in value of \$7,000. You also have \$1,000 cash to use as a down payment. The manufacturer is offering two incentives.

- Option 1: 1.9% financing over the course of the loan, which is 36 months; OR
- Option 2: A rebate of \$4,500 cash back on the vehicle, applied to the amount due at purchase. You would then take a loan from your bank, at a rate of 6.5% on a 36-month loan.

Use the online calculator at www.edmunds.com/calculators/incentives-rebates.html?sv to compare these two options. (Enter zero for sales tax and title costs.) Then answer these questions.

- 1. What is the total cost of the car after your down payment and trade-in?

  - Option 1: \$\_\_\_\_\_
     Option 2: \$\_\_\_\_\_
- 2. What is your monthly payment?
  - Option 1: \$\_\_\_\_\_ Option 2: \$\_\_\_\_\_
- 3. Which incentive is the better choice? Why?



You want to buy a car that costs \$25,000. You do not have a car to trade in, but you have \$2,000 saved for a down payment. The dealer is offering a \$6,000 rebate as an incentive, and you qualify for a first-time-buyer incentive of \$500. You will take a 48-month loan with a 6.5% interest rate. In addition, you will have to pay 7.5% sales tax, and it will cost you \$25 per year for registration, plus \$480 per year in property tax. Your insurance premium will be \$56 per month.

Organize this financial information using the chart below. You can use the loan calculator at https://tools.finra.org/loan to determine your monthly loan payment. Then answer the questions.

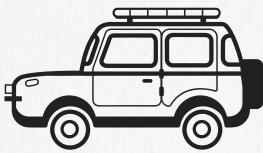
PRICE		a beneficiari da la
Vehicle price	\$	
Sales tax	\$	
Down payment	\$	
Incentives	\$	
Purchase price/Loan amount	\$ 0.00	
PAYMENTS		P
Annual loan payment	Monthly payment: \$x 12 = \$_0.00	
Annual insurance premium	Monthly premium: \$x 12 = \$_0.00	
Annual registration fee	\$	
Annual property tax	\$	
Total annual cost	\$ 0.00	

**1.** What is the total cost of the car over four years? Annual cost x 4 years = 0.00

2. After you have repaid the loan, what will you pay annually for taxes, insurance, and fees? \$\_\_\_\_\_\_

3. If you keep the car for seven years, how much will it have cost you? \$\_\_\_\_\_

**CHAPTER 3: Purchasing a Car** 







#### **PART 3: LEASE OPTION**

You decide instead to lease the car for 48 months. You must pay a \$500 security deposit on the car before you leave the dealership. There is an additional fee of \$250 for the cost of completing the dealer lease paperwork. Your total monthly lease payment is \$383 per month. In your lease agreement, it has been determined that the value of the car will be \$14,000 at the end of the lease term. You are allowed 12,000 miles per year for the car, and the mileage fee for overages is \$.25 per mile. You pay \$68 per month for insurance, and it costs you \$25 per year to license the car. There is a \$1,500 early termination fee on the lease. There is a \$500 penalty if you return the car with "excessive wear and tear."

Organize this financial information using the chart below. Then answer the questions.

ONE-TIME COSTS	
Security deposit	\$
Paperwork fee	\$
ANNUAL COSTS	
Annual lease payment	Monthly payment: \$ x 12 = \$
Annual insurance premium	Monthly premium: \$ x 12 = \$
Annual registration fee	\$
Total annual cost	\$ 0.00
PENALTIES AND FEES	
• Mileage fee over 12,000 miles per year	\$.25 x miles = \$ <u>0.00</u>
• Early termination fee	\$
• Excessive wear and tear fee	\$

 What is the total cost of the car over four years, including your one-time costs? One-time cost \$\_\_\_\_\_+ (Annual cost \$\_\_\_\_\_x 4 years) = \$0.00

 You are in a car accident during the fourth year of the lease and the car is a total loss, thus ending the lease early. How will this affect you?

3. At the end of your lease, you go to the dealer to return the car and lease another one. The dealer notices that the car's odometer reads 59,825 miles. What will happen?

4. When you return the car, you decide you like it and want to purchase it. How much will it cost you?

Now, weigh the options in Parts 2 and 3 and decide which you think you would choose. Why?

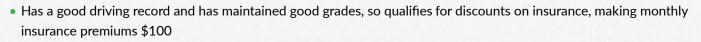
**CHAPTER 3: Purchasing a Car** 

### Activity 2 YOUR FIRST CAR

Now that you've had some practice evaluating and comparing automobile financing options, imagine that you are ready to purchase your first car. Based on the data below, answer the questions and decide which car to purchase, and which financing option will best suit your needs. Use the loan calculator at **tools.finra.org/loan** to determine monthly loan payments. After you've made your choices, be prepared to defend your decision in a class discussion.

#### **BUYER DATA:**

- High school senior planning to attend college away from home next year
- Has \$1,500 saved for a down payment
- Works part-time earning approximately \$150 per week



- ARA
  New, current model year compact car
  Price: \$16,000
  Dealer incentives:

  \$2,000 cash rebate with interest rate of 6.5% on a 48-month loan, OR
  3.9% interest rate on a 60-month loan
  Dealer offers a first-time buyer discount of \$500
- **1.** Determine the monthly and annual financing cost for each option.

	Monthly Cost	Annual Cost
Car A with incentive 1	\$	\$ 0.00
Car A with incentive 2	\$	\$ 0.00
Car B	\$	\$ 0.00

2. What additional costs can you anticipate for each option?

How do these costs factor into your decision?

3. Which car will you purchase? Why?



## (HAPTER 4: Purchasing a Home

### **Did You Know?**

For many Americans, home ownership is still a part of the American dream. Some 52% of the public says it is important to own a home in order to be considered part of the middle class. But 64% of Americans say it is not affordable for young adults in their 20's and 30's today.<sup>4</sup>

Purchasing a home is one of the biggest investments a person will ever make. Not only is it likely to be the most expensive item that most of us will ever purchase; a home is also an important asset in determining financial health. There are many factors to consider when purchasing a home, such as down payments, interest rates, and other terms of a mortgage loan. These factors all affect the overall price you will pay for a home.

### **Getting a Mortgage**

Whether you're talking about a \$100,000 home or one that costs millions of dollars, the simple fact is that m do not have enough money saved to purchase a outright. Because of this, most home buyers turn or canks, credit unions, or finance companies to get a **mortgage** to purchase their home. A mortgage is considered a long-term loan because it is paid in small amounts, typically over the course of 15 or 30 years.

 When you apply for a mortgage, potential lenders assess your creditworthiness by checking your credit rating.
 A high credit rating means that you have a history of making timely payments to people who have loaned you money in the past. The higher your credit rating, the better chance you have of being approved for a mortgage

and cred past past one Down Payment: a portion of the purchase price of an item that is paid up front, while taking a loan on the remainder ate. Consumers with lower s reliable as borrowers in the d for a mortgage or getting

• Another key part of securing a mortgage is your **down payment**. Depending on a buyer's qualifications, most banks and finance companies require a down payment to be anywhere from 5% to 20% of the home's purchase price, or even more. In some situations, a homebuyer's

<sup>4</sup> www.bls.gov/news.release/pdf/cesmy.pdf

Federal Housing Authority (FHA): government agency that sets standards for construction and financing and which, in certain circumstances, will provide mortgage insurance and financial support for first-time homeowners who can only make a small down payment

down page the may be only 0.0% of the home's purchase price, by this requires backing by the Federal Housing Authority (FHA).

- Homes vary widely in price, even within the same city.
- Lenders will determine, k income, monthly debt lia payment, how much mou This, combined with you how much you can affor

Mortgage Insurance: insurance that protects the mortgage lender in the event that a homeowner is unable to repay their loan; required when the down payment is less than 20% of the home's purchase price

- Homeowners whose down and subtracting the amount owed on the mortgage insu the lender in case the homebuye payments. Homebuyers usually partor mortgage insurance until they have 20% equity in the home.
- When you apply for a mortgage, you need to think about
   --γγ long you want to spend repaying the loan. The

ger the period of time a borrower is given to repay a n, the smaller the monthly payment will be. However,

the longer the loan, the more you will end up paying in interest. Most people choose a 15- or 30-year mortgage. The advantage of a 15-year mortgage is that borrowers can usually get a lower interest rate and build equity in

the home more quickly. T is that monthly payments more money to use for d

Interest Rate: percentage paid to the lender for the privilege of borrowing the money year loan rower has d saving.

Ш

- When evaluating mortgage offers, you obvievy must consider the **interest** you will be charged. **Interest rates** can vary widely from lender to lender and year to year. They are usually based on the borrower's credit rating, the length of the loan, and the down payment amount. The interest rate can make a big difference for the amount of money you pay each month and the overall cost of the mortgage, so it is important to coord time recearching and getting quotes from a variet a mortgage with the best ra
- While most people prefer a fixed interest rate (conventional) mortgage, some opt for an **adjustable rate** mortgage (ARM). Fixed rate mortgages offer the borrower

peace of mind, because the interest rate, and the monthly mortgage payment, will always remain the same. With an

adjust Lifetime Cap: a limit on how much the interest lower rate of a variable-rate intere loan can increase

e initial interest rate is usually ional mortgage, but the y payment, steadily increase

over the course of the mortgage, though there is usually a lifetime cap to limit these increases.

 The interest on mortgage loans is typically compounded monthly. When you begin paying your mortgage, you'll

make monthly payments These payments ar Amortization Schedule: **Principal:** the original into two pai borrowed amount accrued ove

a timetable for repaying rs the inte a loan mainder is7 plied to

the loan principal. This is reflected in an amortization schedule, which outlines how each monthly payment is applied over the course of the loan.

# Career Link

Most mortgage companies require a borrower to have enough homeowners' insurance coverage to pay off the mortgage's outstanding balance, which is not always enough to cover the home's value. Basic insurance pricing assumes that the home's full value is being insured. Actuaries make the adjustments necessary to price the insurance when this is not the case.

### **Other Costs Associated**

with H

When shop consider bes

Prepayment Penalties: fees designed to keep ere are oth the borrower from paying the loan off early nd length

Closing Costs: fees paid in addition to the cost of the home

Borrowers she d also pay attention to closing costs and prepayment penalties. Closing costs include a wide range of fees in addition to the cost of the home, such as fees for title searches, deed filings, property surveys, real estate agents, and lawyers. Prepayment penalties are fees charged for paying off a mortgage too quickly. Some low interest

rate mortgage borrowers to

Escrow: property or money held by a third party until the terms of a contract are met; a down payment for a home is held in escrow while all of the other activities associated with buying a home are completed

When purchasing ome, a buyer may be asked to put

money into escrow. This lets the sel is committed to purchasing the hom does not risk losing his or her mone meet the conditions necessary to se passing a home inspection).

Truth in Lending Act: requires lenders to explain how they compute loan charges and to list the loan's annual percentage rate (APR); also gives the borrower three business days to opt out of the loan

ze

As vou can see, getting a mortgage & ess with many factors to conside One way consumers otected is through the Truth in Lending Act. This

legislation is designed to make sure that home buyers have enough information to completely understand the interest

rate and terms of the mortgage.

### **Refinancing and For**

As time goes by, interest rates cha economy and other factors. Somet

Refinance: replace or renegotiate a loan to achieve lower interest or fees, often through a new lender and based on increased equity or improved credit

where they become lower and lower As interest rates decrease, borrowers can try to refinance. Borrowers who had low credit scores when they initially purchased their home may also be able to refinance once they've improved their credit rating.

As with any loan, borrowers must shop around and add up the costs associated with refinancing. Because refinancing involves getting a new mortgage, borrowers usually pay many of the same types of closing cost fees they paid when the original mortgage was processed. For borrowers who are planning to sell their home, these fees could add up to more than the savings expected from refinancing for just a few years. Likewise, prepayment penalties might outweigh

the savings exp Delinguent: past due Sor Foreclosure: legal process that allows a lender to seize property obli if the mortgage loan is not For paid; typically, the lender sells the property and applies the the proceeds to the outstanding debt

closure. When a borrower has a property foreclosed upon, this becomes part of his or her credit report for a period of seven years and can prevent the borrower from obtaining loans in the future.

eet their financial avments on time. ment are unable to fulfill ' and

ha workout or initiate a



### Activity 1

#### SET A HOME-BUYING BUDGET

The first step in shopping for a home is to determine how much you can afford to spend. Look at the families profiled in the chart below and determine the price each can pay for a home using the calculator at www.trulia.com/house-affordability-calculator. Use your city or a city of your choice to answer the calculator's zip code question. After you fill in the chart, answer the questions to learn more about each of the factors that contribute to a home-buying budget.

FAMILY	ANNUAL INCOME	DOWN PAYMENT	MONTHLY DEBT	CREDIT SCORE	HOME PRICE
Α	\$100,000	\$50,000	\$1,500	725	\$
В	\$100,000	\$50,000	\$500	725	\$
С	\$100,000	\$50,000	\$1,500	675	\$
D	\$80,000	\$50,000	\$500	725	\$
Е	\$80,000	\$30,000	\$500	725	\$
F	\$80,000	\$30,000	\$1,500	675	\$

Families A, B, and C all have the same annual income, but their monthly debt and credit scores vary. Where did you
see the biggest difference in the home price they can afford – between A and B, A and C, or B and C? What factor
seems most responsible for this difference?

- 2. Families B and D have different incomes, but the same monthly debt and credit score. How does their income difference affect the home price each can afford?
- **3.** Compare the home prices for families A and D. What does the difference suggest about the relative importance of income and debt for determining a home-buying budget?
- 4. Families D and E are identical except for having different down payments. How important is down payment as a factor in determining how much one can afford to pay for a home?

5. Families D and F have the same income, but their down payment, monthly debt, and credit scores are very different. How do these three factors seem to affect how much they can afford to pay for a home?

6. Based on your analysis of these examples, what advice would you give someone who is planning to shop for a home?

## Activity 2

### UNDERSTANDING AMORTIZATION

The Chen family has decided to purchase a home for \$150,000. They currently have \$30,000 in savings, but they are only willing to make a down payment of \$25,000. In order for them to buy the home, a bank must agree to give the Chens a loan for \$125,000. Use this information to calculate the following:

- 1. What percentage of the home's purchase price does their down payment represent?
- 2. Do you think it is a good idea for the Chens to make this size down payment? Why or why not?

To better understand how mortgages work, create an amortization schedule using the online calculator at **mortgagecalculator.org**. First, click the "Show Amortization Tables" link at the bottom of the calculator and check only the box for "Show monthly amortization table." Then input the Chens' home cost and down payment. Assume they will have a 30-year fixed-rate mortgage with an 8% interest rate. Input zeros for the remaining items in the calculator, then click the "Calculate" button. Scroll down the webpage to see the monthly amortization schedule, which will start off like the one shown here.

Use the amortization schedule and the mortgage summary information to answer the following questions.

- 3. What happens to the interest and principal amounts over the course of the mortgage?
- 4. What is the total cost of the home after the mortgage has been paid off? Don't forget to include the \$25,000 down payment in the total cost. \$\_\_\_\_\_
- 5. What do you think would happen to this total cost if the Chens paid an extra \$100 each month to reduce the principal? Why?
- 6. What would happen if the Chens took a 30-year adjustable rate mortgage with a 4% interest rate that increases by .25% after the first year, with expected subsequent increases of .25% per year up to a maximum interest rate of 8%. Use the calculator at www. mortgagecalculator.org/calcs/fixed-vs-arm.php to compare this adjustable rate mortgage with the fixed rate mortgage described above. (Input zeros for the remaining items in the calculator.)

	MONTH	MONTHLY PAYMENT	INTEREST	PRINCIPAL	BALANCE
s'	1	\$917.20	\$833.33	\$83.87	\$124,916.13
ir	2	\$917.20	\$832.77	\$84.43	\$124,831.70
	3	\$917.20	\$832.21	\$84.99	\$124,746.70
on	4	\$917.20	\$831.64	\$85.56	\$124,661.14

%

**a.** What happens to the monthly payments over the course of the adjustable rate mortgage?

**b.** What is the total cost of the home after the adjustable rate mortgage has been paid? \$\_\_\_\_\_

- 7. If you had the choice, would you select a fixed rate or adjustable rate mortgage? Why?
- 8. Now suppose that the Chens decide to refinance their fixed rate mortgage after 5 years. Their new 30-year mortgage has a 6.5% fixed interest rate, with closing costs of \$2,000. Use the calculator at www.mortgagecalculator. org/calculators/should-i-refinance.php to find out how refinancing will change their mortgage costs. (Input zeros for any information not provided above.)
  - **a.** What is the Chens' monthly mortgage payment after refinancing? \$\_\_\_\_\_
  - b. What will be their total savings after their new mortgage has been paid off? \$\_\_\_\_\_

### Activity 3 A HOME OF YOUR OWN

You are buying your first home and want to select the best possible mortgage. Use the calculator at **mortgagecalculator**. **org/calcs/fixed-vs-arm.php** to compare a 30-year fixed rate mortgage with a 5.5% interest rate, and a 30-year adjustable rate mortgage with a 3.25% interest rate that increases by .25% each year after the first year, up to a maximum interest rate of 9.25%. (Input zeros for the remaining items in the calculator.)

Assume that you are purchasing a \$200,000 home with a 20% down payment. Use the information provided by the calculator to answer these questions.

1. What is your monthly payment with each mortgage?

Fixed rate mortgage payment: \$\_\_\_\_\_ per month

Adjustable rate mortgage payment: \$\_\_\_\_\_ per month

 What is the total cost of your home after you have paid off each mortgage? Total home cost with fixed rate mortgage: \$\_\_\_\_\_

Total home cost with adjustable rate mortgage: \$\_\_\_\_\_

3. Which mortgage seems the better choice for you? Why?

4. What financial risks do you face by selecting this mortgage?

5. What are the financial benefits of your choice?



**CHAPTER 4: Purchasing a Home** 

## (HAPTER 5: Insurance Protection

### **Did You Know?**

Some 45% of American consumers are concerned they will burden dependents if they die prematurely, and 58% are concerned about paying for medical expenses.<sup>5</sup>

Insurance of all kinds is important in protecting people from the financial impact of illness, injury, property loss, and even death. Learning about the different types of insurance will help you manage your financial risk through purchasing and utilizing insurance policies that best meet your financial needs and goals.

### **Insurance Terminology**

To understand various types of insurance, you need to know some key terms:

- Claim: a policyholder's official notification to the insurance company requesting payment of an amount due for a covered loss
- Deductible: a dollar amount a policyholder pays before the insurer starts to make payments for a covered loss
- Insurance: promised payment for specific future losses should they occur in exchange for a payment called a premium
- Insurance Policy: a written contract between an insurer and a customer (the policyholder) describing the term of the insurance, what is covered, the cost of the premium, and the deductible amount
- Insurer: a company that pays to compensate the policyholder for losses or damages as described in an insurance policy as long as the premium is paid
- Policyholder: the owner(s) of an insurance policy
- Premium: the periodic payment for an insurance policy

### Health Insurance

At one time or another, all of us need medical care, and it can be very expensive. A typical office visit to a doctor can cost anywhere from \$80 to \$220. More serious care, including x-rays, emergency room visits, hospital stays, medical equipment, and even medication can cost in the thousands. Health insurance provides coverage for these costs.

You have likely been covered under your parents' policy, but will some day need your own health insurance. Policies vary widely. Most health insurance requires that you pay a monthly premium to secure coverage. In exchange, your insurer will pay a portion or all of your medical bills. There may be limits on coverage that exclude some medical services. such as cosmetic surgery. There may also be limits on your choice of doctors: some policies pay a larger proportion of covered costs

for in-network healthcare, which is provided by physicians and facilities whose fees are set by contract, than for out-ofnetwork care, which is provided by physicians and facilities who set their own fees.

Premiums can also vary widely, in part based on the range of benefits you receive. Some, but not all, health insurance policies cover costs of vision care and dentistry. In other cases, you will need to purchase this coverage separately.

Co-pay: a form of cost-sharing that

dollar amount for a medical service

These benefits, r policy you receiv requires the insured to pay a fixed Most health insu or prescription

ribed in the

bay a

portion of your her care costs. Some policies require a copayment, or co-pay, which is usually a flat fee for services. For example, you might pay a \$25 co-pay each time you go to the doctor's office, or a \$10 co-pay when you pick up a prescription at the pharmacy. The insurance company pays the remaining cost of the office visit and the prescription.

Another common feature of most health insurance policies is a **deductible**. This is usually a set amount you must pay before your coverage "kicks in" and can range from several hundred to several thousand dollars, depending on your policy. In addition, many insurance companies now require policyholders to pay coinsurance, which sets a percentage you must pay for medical services after you have paid your deductible. For example, suppose you have a \$3,000 deductible and 20% coinsurance. Your coverage "kicks in" after you have paid \$3,000 for medical services, but at that point your coinsurance also "kicks in," requiring you to pay 20% of all future medical costs.

<sup>5</sup>LIMRA 2016 Insurance Barometer Survey: http://advisor.simplicitymarketing.com/wp-content/uploads/2017/01/2016-Insurance-Barometer.pdf

Luckily, most health insurance policies also have an out-ofpocket maximum, which sets a limit on how much you must

Co-pays, deductibles, coinsurance, and

pay on your o other out-o which can b maximum, I

Out-of-Pocket Maximum: the maximum amount one must pay for medical expenses; costs above the maximum are covered by the Many peop health insurer

this maximum, e you reach the ur covered costs. ligh their

employers as a benefit. In most cases, the employer pays some or the entire insurance premium, and the employee pays the remaining costs associated with the policy, such a co-pays and deductibles. Some employers also provide Health Reimbursement Accounts (HRA), which are employer-funded accounts that employees can use to pay uncovered medical costs.

When people leave a job that provided them with health insurance, they can usually maintain coverage for as much as 36 months through COBRA. Under this federal law, exemployees continue to receive the benefits of their former employer's group health insurance policy, but must pay all monthly premiums as well as administrative fees.

Individuals can of course purchase health insurance on their own, but the cost is usually much higher than for a group policy such as those offered by employers. For this reason, uninsured individuals sometimes purchase "catastrophic" health insurance, which typically has low monthly premiums and very high deductibles. This kind of health insurance

provides financial protection illnesses while the policyhd routine medical treatment.

Marketplace: the federal website www. healthcare.gov where individuals and small businesses can shop for and purchase health insurance

In recent years, more and mor cople are obtaining health insurance through the Marketplace at www.healthcare.gov, a federal website created to help implement the Affordable

Care Act. Individuals, families, and small businesses can all

use the Marketplace to com different healthcare policies with limited income can al to make health insurance very limited income, the fe

nefits of Medicaid: a governmentprovided health insurance . Those

Children's Health Insurance Program (CHIP): a state-administered federal health insurance program for children in low-income families that do not qualify for Medicaid

low-cost or free healthcare co age through Medicaid and the Children's Health Insurance Program (CHIP). For older Americans, affordable health insurance is provided by Medicare.

The federal government also helps people pay healthcare costs through tax policy. Employers can offer their employees Flexible Spending Accounts (FSA), which are tax-deferred savings accounts that can be used to pay medical expenses not covered by an insurance policy, including deductibles, co-pays, and coinsurance. The law sets a limit on how much an employee can set aside in an FSA (\$2,650 in 2018) and allows only \$500 to carry over in the account from one year to the next – anything more is forfeited, so careful spending and record-keeping is essential.

Tax law also allows individuals enrolled in a high-deductible health (HDHP) plan to set up their own tax-deferred Health Savings Accounts (HSA). There are limits on how much can be deposited to an HSA each year (\$3,450 for an individual in 2018) but the entire amount can be carried over from year to year, allowing taxpayers to accumulate substantial funds to pay for high deductibles and other outof-pocket medical costs. In addition, HSA funds can be invested, similar to an IRA, providing an opportunity to increase one's healthcare savings even more.





### Activity 1 COMPARING HEALTH PLANS



Many companies offer their employees a choice of health care plans that vary in upfront costs and coverage. One may have a higher premium but a lower deductible, while another has a lower premium but less coverage overall, or even coverage only for certain types of medical care. Each employee has to weigh their own needs against the options presented by each plan and choose the one that minimizes their costs while maximizing their coverage. Risk needs to be considered, as well — you may be healthy today, but what are the chances of illness or hospitalization in the future? Practice selecting the best health plan by reading through the two plans outlined in this chart. Then answer the questions below.



	PLAN A	PLAN B	
Monthly Premium	Single: \$70.44 Family: \$472.61	Single: \$209.26 Family: \$945.98	
Deductible	Single: \$1,500 Family: \$3,000	<ul> <li>In-Network: \$0</li> <li>Out-of-Network: \$500 Single/\$1,000 Family</li> </ul>	
Health Reimbursement Account (HRA)	Company reimburses the first half of your deductible, so you will only be responsible for the second half	Not available	
Coinsurance (what you pay)	\$0	<ul><li>In-Network: \$0</li><li>Out-of-Network: 20%</li></ul>	
Out-of-Pocket Maximum	<ul> <li>In-Network: \$5,000 Single/\$10,000 Family</li> <li>Out-of-Network: \$10,000 Single/\$20,000 Family</li> </ul>	Single: \$5,000 Family: \$10,000	
Preventive Care — child well visits, 1 routine annual exam per year	In-Network covered 100%, no deductible	In-Network covered 100%	
Specialist Care	In-Network covered 100% once deductible is met	In-Network covered 100%	
Pharmacy	In-Network: \$20 copay	In-Network: 20% copay	
Emergency Room Visits	In-Network: \$20 copay	In-Network: 20% copay	
Out-of-Network Coverage for all categories	70% (you pay 30%)	80% (you pay 20%)	

Scenario 1: You are single and in relatively good health.

- 1. You don't take any regular medications, and besides your routine annual check-ups, rarely visit the doctor. Which plan would you choose? Why?
- 2. You take medication that costs \$28 per month without insurance. How much would you expect to pay over the course of one year under each plan?
  - Plan A: \$\_\_\_\_\_ Plan B: \$\_\_\_\_\_
- 3. Imagine you fall ill and have \$4,000 in medical bills this year for in-network, non-emergency room medical services. Approximately how much could you expect to pay for healthcare this year under each plan? (Remember to include your premiums.)
  - Plan A: \$\_\_\_\_\_ Plan B: \$\_\_

**Scenario 2:** Imagine that you are married and have 2 children, and will be including both your spouse and your kids in your healthcare plan.

4. How much will the premium for each plan cost you per year?

• Plan A: \$\_\_\_\_\_ • Plan B: \$\_

- 5. Last year, your spouse needed surgery that would have cost \$30,000 if it were not covered by insurance. How much would you have paid for this surgery under each plan if the medical providers were all in-network?
  - Plan A: \$\_\_\_\_\_ Plan B: \$\_\_\_\_\_
- 6. Your child has a medical condition that requires weekly visits to a specialist who is out-of-network and charges \$230 per visit. In addition, your child needs 4 medications that cost a total of \$1,000 per month at an in-network pharmacy (if purchased without insurance). What would be your annual costs under each plan? Remember, your out-of-pocket payments to the specialist count toward your deductible.
  - Plan A: \$\_\_\_\_\_
- Plan B: \$\_\_\_\_

## **Career Link**

#### ACTUARY

1

Actuaries are concerned with risk — looking at the likelihood of bad events happening, quantifying the cost of those events, and setting up financial models to protect clients at a reasonable price. While risk is a factor in all industries, no other industry handles the financial impact of risk more than the insurance industry.

Actuaries have traditionally specialized in life, health, property, and casualty insurance, where they work on developing, pricing, and managing insurance products. They are involved in defining and creating pension and retirement plans. Some are finding roles as financial planning advisors. Actuaries must have a bachelor's degree, typically in fields like math or finance, and must pass a series of exams to be certified in the field. These jobs consistently rank as being among the best in America.

#### INSURANCE UNDERWRITER

As an insurance underwriter, you would review applications for insurance policies. It would be your job to understand the amount of risk, or the chance that the applicant would file an insurance claim, associated with each application. Insurance underwriters typically have a bachelor's degree in business or math, and some knowledge of basic accounting principles. They also possess strong interpersonal and communications skills, as the work involves working with other people in a variety of ways.

### **INSURANCE AGENT**

Your job as an insurance agent would include meeting with potential clients to determine their insurance needs. You could be a captive agent, working for one insurance company and only selling that company's products, or you could be an independent insurance agent, or broker, representing several companies. In either case, you could select the policy that is best suited for your client. You would then help your client fill out an insurance application, which you would forward to an underwriter. After the company issued the policy, you would deliver it to the client and review it to make sure the customer fully understood the coverage.

accident, theft, etc.

There are a number of different types of insurance that people purchase throughout their lives to protect themselves and their property from loss, theft, damage, and accidents. These include auto insurance, property insurance

like renter's and homeowner's, specialized insu boats, motorcycles, and jewelry, etc. of protecting drivers and others in the event of an

### **Auto Insurance**

Nearly every state requires drivers to have **auto insurance**. An automobile accident can be financially devastating if it involves serious injuries and/or damage to the vehicles involved. By carrying auto insurance, drivers protect themselves and others from bearing the burden of unexpected costs due to an accident, vandalism, or fire. If you are a driver, you are probably covered under your family's auto insurance policy. Before long, however, you will need to shop for your own auto insurance.

There are several major types of auto insurance

ized for you in the chart below. Study the chart to rs and of an e policy, noting which coverage types are required and which are optional.

The factors that affect the price you will pay for auto insurance include:

- Make and model year of your vehicle: newer and luxury cars usually cost more to insure
- Where you live: costs are usually higher in areas with high crime rates, high accident rates, and limited parking

	TYPES OF AUTO INSURANCE			
TYPE OF COVERAGE	KEY CHARACTERISTICS			
Bodily Injury	<ul> <li>Required in most states (48)</li> <li>Pays for damage you cause including bodily injuries, property damage, and legal bills resulting from lawsuits related to the damages</li> <li>Listed on policies in the form of three numbers such as 50/100/25: the first number represents the bodily injury coverage for each individual in thousands of dollars; the second number represents</li> </ul>			
and Property Damage Liability	<ul> <li>the maximum amount that will be paid for bodily injury per accident in thousands of dollars; the third number represents the maximum amount that will be paid for property damage per accident in thousands of dollars</li> <li>Even though you have insurance, you can be sued for additional funds if the costs of an accident</li> </ul>			
Personal Injury Protection	<ul> <li>exceed the maximum that the insurance company has agreed to pay</li> <li>Required in very few states</li> <li>Pays for medical expenses, funeral expenses, and lost wages for you and any passengers in your vehicle</li> </ul>			
Collision	<ul> <li>Not required in any state</li> <li>Pays for repairs to your vehicle if you have an accident that is your fault</li> <li>Pays a percentage of the car's value if it is totally destroyed</li> </ul>			
Comprehensive	<ul> <li>Not required in any state</li> <li>Pays for damage to your vehicle, no matter what causes it: vandalism, theft, fire, a natural disaster, etc.</li> <li>Expensive, and people who have it usually choose to have a high deductible to keep the cost lower</li> </ul>			
Uninsured / Underinsured Motorist	<ul> <li>Required in many states</li> <li>Pays for medical bills and property damage if you are in an accident with someone who doesn't have enough/any insurance or if you are the victim of a hit and run</li> </ul>			
Miscellaneous Coverage	<ul> <li>Not required in any state</li> <li>Extra features like roadside assistance, towing, or the cost of a rental car in the event of an accident</li> <li>This type of coverage adds cost to a policy, but is convenient if you are in an accident or have mechanical difficulties</li> </ul>			

- Coverage selected: more types of coverage and higher levels of coverage cost more
- Deductible: as with health insurance, the deductible is the amount you must pay before your insurance coverage "kicks in;" choosing a higher deductible will generally decrease your monthly premium payment but means you pay more out of pocket in the event of an accident
- Driving record: a history of safe driving with no accidents or tickets can lower rates
- Driver's age: younger drivers pose a statistically higher risk to the insurance company, because of a higher rate of accidents, so their insurance costs are higher

- Claims history: making several claims in a short time period could raise your costs
- Payment history: low credit scores and missed payments make you seem like a bigger risk, raising your rates

As a young driver, your premium will typically be higher because drivers ages 16-24 are involved in more accidents than more experienced drivers. To help lower the cost of auto insurance premiums, some insurance companies offer young drivers discounts for taking certified driver's education courses or maintaining good grades in school.

### Activity 2 AUTO INSURANCE

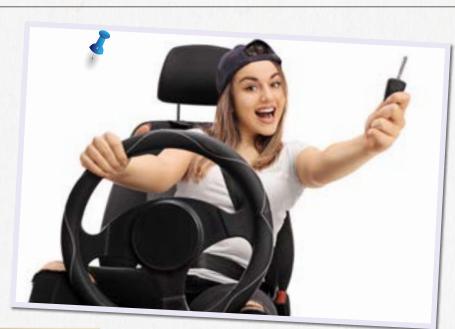
Automobile liability insurance is often described using three numbers, such as 50/100/25. These numbers refer to the amount of liability insurance coverage. For example, 50/100/25 coverage would pay up to \$50,000 for bodily injury to a single individual, \$100,000 total for bodily injury to all parties involved in an accident, and \$25,000 of property damage.

	MONTHLY PREMIUM		
Coverage Amount	Rate A	Rate B	Rate C
50/100/25	\$553.00	\$617.00	\$451.00
100/200/50	\$1,036.00	\$1,174.00	\$830.00
150/300/75	\$1,363.00	\$1,566.00	\$1,133.00

1. Which set of rates would you choose if you had a very inexpensive car?

2. Which set of rates would you expect if you had a safe driving record, good credit, and lived in a low-crime area?

- 3. What if your car were fairly expensive and you lived in an area with frequent traffic accidents which set of rates would you expect? \_\_\_\_\_
- 4. What's the total annual difference in cost between the least expensive set of rates and the most expensive set for the highest level of coverage? When do you think it would be worth getting the extra coverage? What steps could you take to ensure you get the lowest rates?



# Homeowner's and Renter's Insurance

The most valuable asset owned by most people is their home. Since homes cost so much money, it is important that they are insured in the event of fire, theft, or other unexpected events. Mortgage lenders require homeowner's insurance until the home is paid for in full. Even after you own your home, maintaining **homeowner's insurance** is important to protect you from financial loss.

Homeowner's insurance prices vary based on several factors, including the age of the home, what the house is made of, and the home's proximity to a fire station. The deductible amount also affects the insurance premium. Choosing a higher deductible decreases the premium, but increases your out-of-pocket costs in the event of a loss. Discounts are another way to lower your premium. Insurers often offer a discount if the home has specific safety features such as alarm systems and working smoke detectors. You may also receive a discount for bundling, which is when you purchase several types of insurance, usually homeowner's and auto, from the same agent, broker, or company.

When selecting insurance coverage, it is important to know how much your home is worth, what it would cost to rebuild it if it were destroyed, the value of your home's contents, and specific coverage necessary because of the location of your home (such as flood insurance). If you are renting a home, townhouse, or apartment, you should consider having **renter's insurance** on your personal property in the event of a fire, theft, or some other event. Renter's insurance will pay for losses incurred while you are living in a rented residence by providing you with a cash payment to replace the items that have been lost or the damages incurred. Renter's insurance can be purchased inexpensively and, like most other policies, has a deductible that must be met before a claim is paid. Many leasing companies require their tenants to purchase renter's insurance before they are approved for the lease.

Both homeowner's and renter's insurance policies typically provide protection if personal property kept within your residence is lost or stolen. They also often provide coverage for certain medical and liability risks, such as "slip and fall" types of injuries in your home, as well as claims against you for libel or slander.

### **Other Insurance Types**

There are many types of insurance not covered in this chapter — dental, vision, mortgage, title, boat, travel, and pet, among them, as well as specialized insurances for businesses operating in various industries (e.g., worker's compensation, special liabilities for childcare centers and schools, etc.). As you plan your future, it is important to consider the need and costs for insurance protection.



### Life Insurance

Young people often disregard **life insurance**, but nearly everyone needs it. The reasons for purchasing life insurance are as varied as the people who buy it. Ask yourself, "If I died tomorrow, would it be a financial hardship on any of the people I care about?" If the answer is yes, then you probably need life insurance. Some specific reasons include:

- To replace lost income to support one's family. For example, if a parent dies, life insurance provides money to pay expenses and support the family.
- To pay the cost of final expenses such as funeral and burial costs, debts, medical bills, taxes, and so on.
- To provide one's heirs with an inheritance.
- Students, or their parents, may buy life insurance to cover the cost of repaying student loans.
- Many employers offer life insurance as one of the benefits of working for the company. Amounts differ from employer to employer, and sometimes the employee can choose the value of coverage.

### How to Purchase Life Insurance

When purchasing life insurance, you must designate a **beneficiary**; ideally, you will name a primary beneficiary AND a secondary beneficiary. By appointing a secondary beneficiary, you eliminate the risk of losing the insurance payout in the event that the primary beneficiary also dies. For example, married people will typically name their spouses as primary beneficiary and their children as secondary beneficiaries. You can also name your **estate** as the beneficiary. When you purchase life insurance, the insurance company typically requires a medical exam and review of family history. This exam helps the company determine the **risk** associated with issuing a policy to you. Risk can vary due to family characteristics (such as a history of illness), your personal characteristics (age), or your lifestyle choices (smoking). Actuaries use sophisticated techniques to measure risk.

Insurance companies are not required to insure everyone who applies, nor are they required to charge the same premium to everyone they insure. If an insurance company completes a physical examination and determines you have a high mortality risk (such as if a terminal disease is found, for example), they can reject your application and deny you coverage. If you are in good health, fairly young, and have a healthy lifestyle, then you can be insured for a relatively small premium. On the other hand, if you have health issues, an unhealthy lifestyle, are elderly, participate in dangerous activities, or hold a high-risk job, the cost of the insurance policy may be higher. The insurance company considers all of this before they issue a policy and determine the premium they will charge for it.

Many people are unsure about how much life insurance they should purchase. For guidance, visit the Life and Health Insurance Foundation for Education website at **www.lifehappens.org**. As you will soon see, the answer truly varies based on each person's circumstances and needs.

When selecting life insurance, consumers have several options available to them. This chart highlights the various types of life insurance that are available.

	4			
	Term Life	Whole Life	Universal Life	Variable Life
	<ul> <li>Least expensive form of life insurance</li> </ul>	• The premium you pay always stays the same	<ul> <li>You can adjust the amount of coverage you have</li> </ul>	• You can select the investment
	<ul> <li>Covers you for a set period of time, known as a "term" (for example, 10 years)</li> <li>Requires renewal, usually</li> </ul>	<ul> <li>The value of the policy increases over time because you build cash value that is tax- deferred</li> </ul>	<ul> <li>You can adjust the amount you pay for your premium</li> <li>The value of the policy increases over time because you build tax-deferred cash value</li> </ul>	<ul> <li>options you want</li> <li>You are not taxed on the earnings until you redeem the policy</li> </ul>
	<ul> <li>Acquires renewal, usually at a higher rate, at the end of the term</li> <li>The cost tends to rise at each renewal</li> </ul>	• You are not allowed to select the investments; the insurance company controls how the money is invested	<ul> <li>The insurance company guarantees a certain rate of return on your money</li> <li>You cannot decide how the money is invested</li> </ul>	• You can use the interest earned on the investments to pay the premiums
Z	<ul> <li>Pays if you die within the period of time selected</li> <li>You can select the amount of coverage you want at the start of each term</li> </ul>	<ul> <li>You cannot change the amount of coverage you have after the initial selection</li> </ul>	• If you lower the amount you pay for your premium for too long, then the coverage could lapse and you would no longer have the policy	<ul> <li>If you select bad investments, you could lose money on the policy</li> </ul>

**KEY CHARACTERISTICS** 

### **Activity 3** PLANNING FOR PROTECTION

You are just starting your first real job, as a temp office worker, and need to get insurance. You have an insurance line item in your budget of \$2,000 per year. Using the chart below, conduct research about the cost of health, auto, homeowner's/renter's, and life insurance. Assume that, as a temp, you will have to pay for health and life insurance yourself.

Use your findings to make decisions about the types of insurance coverage you will be able to afford, knowing that they are all important. Your goal should be to prioritize the types of insurance you need and then to find pricing that will enable you to purchase what you need. After you fill in the chart, answer the questions below and be prepared to discuss your findings with classmates. Start your research with these websites:

Life and Health Insurance Foundation for Education: www.lifehappens.org

Insurance Information Institute: www.iii.org

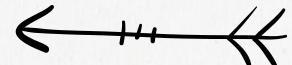
	RESEARCH FINDINGS				
Type of Insurance	Coverage	Deductible	Approximate Cost		
Health	\$	\$	\$		
Auto	\$	\$	\$		
Homeowner/ Renter	\$	\$	\$		
Life	\$	\$	\$		

**1.** Based on your \$2,000 annual budget, what types of insurance did you elect to purchase? Why?

- 2. What financial risks are you protecting against by selecting these types of insurance?
- 3. What financial risks do you run by not having the remaining types of insurance?
- 4. Of the four types of insurance you researched, which do you think is most important for you at the start of your working life? Why?
- 5. How might this change after five or ten years? Why?
- 6. What questions do you still have about insurance?

**CHAPTER 5: Insurance Protection** 

## BOOK 3 Final Assessment Quiz



- You would like to put more money into your savings account each month. Which of the following would NOT be a financially sound strategy?
- **a.** Consolidate your debt so that you can pay less per month.
- **b.** Reduce credit card payments to the minimum each month.
- **c.** Find ways to reduce spending on needs, such as negotiating for lower insurance premiums.
- **d.** Cancel your gym membership and purchase a bike instead.
- 2. You are having trouble keeping up with your monthly bills. You should:
- **a.** Apply for a consolidation loan.
- **b.** File for bankruptcy.
- **c.** Hire a debt settlement company to help you make a plan for reducing your debt.
- **d.** Contact your lenders and let them know you are having a hard time paying.
- 3. Which of the following would negatively impact your credit score?
- **a.** An increasing amount of debt each month
- **b.** A history of paying your bills on time every month
- **c.** A new job
- **d.** Expensive hobbies
- 4. When shopping for a loan, you should ask:
- **a**. Whether the interest rate is fixed or variable
- **b.** If there are penalties for early repayment
- **c.** How frequently the interest is compounded
- **d.** All of the above
- 5. You are buying your first home and budgeting for a mortgage. Your monthly payment will be based on the cost of the home and:
- **a.** Your down payment
- **b.** Your credit score
- **c.** Length of the loan
- **d.** All of the above



- 6. Two people apply for a 5-year loan to purchase a new car for \$15,000. Person A has a credit score of 745, and Person B has a credit score of 600. Which customer is likely to have a higher interest rate and insurance costs?
- 🗌 a. Person A
- **b.** Person B
- **c.** They will have the same interest rate and insurance costs.
- **d.** Person B will have a lower interest rate, but insurance will be the same.
- You're ready to trade in your old vehicle, but you're not sure if you want to finance a used car or lease a new car. A lease makes more financial sense if:
- **a.** You have a long commute to work.
- **b.** You can do most of the repairs yourself.
- **c.** You like to always have the latest tech and luxuries.
- **d**. You want to save money on insurance.
- 8. Insurance is based on the principle of probability insurance companies measure the probability you will need to make a claim. A high probability means higher premiums, a low probability means lower premiums. Who do you think will have the lowest premium on a life insurance policy?
- **a.** Person A is 100 pounds overweight, and smokes cigarettes.
- **b.** Person B is 26, and runs 10 miles a day.
- **c.** Person C is generally healthy and works in construction, typically on high-rise scaffolding.
- **d.** Person D is 75 and has a chronic illness.
- 9. You are shopping for insurance for your family. Which of the following is not required by law, but is critical, particularly for parents?
- **a.** Auto insurance
- **b.** Life insurance
- **c.** Mortgage insurance
- **d.** Homeowner's insurance
- You are shopping for a mortgage and choosing between a 30-year fixed, a 30-year adjustable, and a 15-year fixed. The 15-year is best if you want:
  - **a.** To build equity quickly
  - **b.** Lower monthly payments to start
  - $\Box$  c. Lower monthly payments for the life of the loan
  - **d**. Steady payments to make it easier to budget

## GLOSSARY

**Chapter 1** 



**Budget:** an itemized list of income and expenses over a given period of time

**Certificate of Deposit (CD):** a savings account issued by a bank that has a fixed maturity date and interest rate based on this timeline; money can be accessed in an emergency, but fees are typically charged for early withdrawal

Needs: basic survival necessities

Wants: items a person desires that are not essential

### **Chapter 2**



Annual Percentage Rate (APR):

actual yearly cost of a loan, calculated by applying the annual interest rate to the loan amount plus any upfront fees to determine actual annual payment, and dividing the actual annual payment by the loan amount (e.g., \$5,000 loan at 5% + \$500 fees =  $$5,500 \times 5\% = $275$ + \$5,000 = 5.5% APR)

**Authorized User:** an individual who is named on another person's credit card account and allowed to make purchases but is not responsible for the debt

**Balance Transfer:** when one credit card company takes on debt originally owed to another credit card company

**Bankruptcy:** a legal process that reduces, restructures, or eliminates debts

**Credit Bureau:** a for-profit company that collects information about individuals' and businesses' debts and assigns a numerical value called a credit score that indicates the borrower's creditworthiness

**Credit Counseling:** working with a non-profit organization to review one's financial situation and make a plan to pay down debt

**Credit History:** information on a person about the number and types of credit accounts they have, how long the accounts have been open, the amounts owed on each account, the amount of available credit being used, whether bills are paid on time, the number of recent credit check inquiries, and information about bankruptcies, liens, judgments, and collections

**Credit Rating:** a ranking typically expressed as a number or letter, based on one's credit history and used by

financial institutions for loan and credit approval as well as determination of loan or credit terms

**Credit Report:** a report detailing an individual's credit history used to determine creditworthiness

**Debt Settlement:** working with a for-profit company to negotiate a reduced debt amount and new payment terms with one's creditors, for a fee

**Down Payment:** a portion of the purchase price of an item that is paid up front, while taking a loan for the remainder

**FICO Score:** a score (between 300 and 850) given to an individual based on payment history, current level of indebtedness, types of credit used, length of credit history, and new credit information, which is used to determine creditworthiness and risk

**Fixed Interest Rate:** interest rate that stays the same over the course of the loan

**Grace Period:** an amount of time in which no interest is charged or payments can be deferred on a loan

**Identity Theft:** stealing someone's personal, identifying information and using it to make purchases or to get other benefits

**Installment Loan:** a loan where the principal and interest are repaid in equal payments at fixed intervals, usually monthly

**Loan:** an amount of money borrowed and repaid with interest

**Loan Sharks:** individuals who charge exorbitant interest rates on loans

**Payday Loan:** short-term, high-interest loan made using a future paycheck as collateral

**Refinance:** renegotiate a loan to achieve lower interest or fees, often through a new lender and based on increased equity or improved credit

**Secured Credit Card:** requires a cash deposit that becomes the credit line for that account and is returned when the account is closed

**Statement:** a summary of financial transactions which have occurred over a given period

**Truth in Lending Act:** requires lenders to explain how they compute loan charges and to list the loan's annual percentage rate (APR); also gives the borrower three business days to opt out of the loan

Variable Interest Rate: interest rate that can change over the course of a loan

### **Chapter 3**



**Book Value (BV):** how much a particular car is worth based on its condition, mileage, and other factors

**Down Payment:** a portion of the purchase price of an item that is paid up front, while taking a loan for the remainder

**Incentives:** factors such as special finance rates, rebates, or other offers designed to encourage buyers to purchase a vehicle

**Lease:** paying only a portion of the vehicle's sales price and returning it to the dealer at the end of the specified time

**Purchase:** paying the vehicle's full sales price and keeping it as long as one wants

**Trade-in Value:** the amount of credit that a dealer is willing to offer toward the purchase price of a new or used vehicle in exchange for ownership of the vehicle being traded in

### **Chapter 4**

Adjustable Rate: interest rate that can change over the course of a loan



Amortization Schedule: a timetable for repaying a loan

Closing Costs: fees paid in addition to the cost of the home

**Credit Rating:** a ranking typically expressed as a number or letter, based on one's credit history and used by financial institutions for loan and credit approval as well as determination of loan or credit terms

Delinquent: past due on a scheduled loan payment

**Down Payment:** a portion of the purchase price of an item that is paid up front, while taking a loan on the remainder

**Equity:** the amount of value a person "owns" in their home, measured by subtracting the amount owed on the mortgage from the total home value

**Escrow**: property or money held by a third party until the terms of a contract are met; a down payment for a home is held in escrow while all of the other activities associated with buying a home are completed

**Federal Housing Authority (FHA):** government agency that sets standards for construction and financing and which, in certain circumstances, will provide mortgage insurance and financial support for first-time homeowners who can only make a small down payment

**Fixed Interest Rate:** interest rate that stays the same over the course of the loan

**Foreclosure**: legal process that allows a lender to seize property if the mortgage loan is not paid; typically, the lender sells the property and applies the proceeds to the outstanding debt

**Interest**: money that is paid to the lender by the borrower for the use of the lender's money

**Interest Rate**: percentage paid to the lender for the privilege of borrowing the money

**Lifetime Cap**: a limit on how much the interest rate of a variable-rate loan can increase

Mortgage: a loan used to purchase a home

**Mortgage Insurance:** insurance that protects the mortgage lender in the event that a homeowner is unable to repay their loan; required when the down payment is less than 20% of the home's purchase price

**Prepayment Penalties**: fees designed to keep the borrower from paying the loan off early

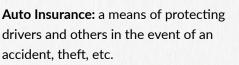
Principal: the original borrowed amount

**Refinance:** replace or renegotiate a loan to achieve lower interest or fees, often through a new lender and based on increased equity or improved credit

**Truth in Lending Act:** requires lenders to explain how they compute loan charges and to list the loan's annual percentage rate (APR); also gives the borrower three business days to opt out of the loan

**Workout**: a formal repayment or loan forgiveness arrangement between a borrower and lender

### **Chapter 5**



**Beneficiary:** the person(s) who will receive an insurance payout

**Benefits:** specific services the insured is entitled to under the policy

**Children's Health Insurance Program (CHIP):** a stateadministered federal health insurance program for children in low-income families that do not qualify for Medicaid

**Claim:** a policyholder's official notification to the insurance company requesting payment of an amount due for a covered loss **COBRA:** a law that allows a person to continue to be covered under a company's health insurance plan after termination from the company as long as the person pays for that coverage

**Coinsurance:** a form of cost-sharing that requires the insured to pay a set percentage of medical expenses after the deductible has been met

**Co-pay:** a form of cost-sharing that requires the insured to pay a fixed dollar amount for a medical service or prescription

**Coverage:** what the insurance company includes as part of the insurance policy

**Deductible:** a dollar amount a policyholder pays before the insurer starts to make payments for a covered loss

**Estate:** wealth and possessions left by someone to be divided after they die

Flexible Spending Account (FSA): a tax-advantaged account set up by an employer where the employee can deposit a fixed amount of wages to pay for uncovered medical expenses; all but \$500 saved in the FSA must be used in the year the money is deposited

**Health Insurance:** protection from monetary losses associated with illness or bodily injury

Health Reimbursement Account (HRA): an employerfunded savings account that employees can use to pay for medical expenses their health plan does not cover

Health Savings Account (HSA): a tax-advantaged account set up by individuals who are covered under highdeductible health plans to save for medical expenses their health plans do not cover

**High-Deductible Health Plan (HDHP):** a health insurance plan with lower premiums and higher deductibles than a traditional health plan; currently (2019) defined by the Internal Revenue Service as any plan with a deductible of at least \$1,350 for an individual or \$2,700 for a family, with total yearly out-of-pocket expenses (including deductibles, copayments, and coinsurance) less than \$6,650 for an individual or \$13,300 for a family

**Homeowner's Insurance:** protection from financial loss if a home is damaged or destroyed, a theft occurs, or the homeowner faces certain types of medical or liability claims **In-Network:** healthcare providers who have a signed contract with an insurance company to provide services at a predetermined rate; insurers can negotiate lower costs in exchange for giving the healthcare provider a potentially greater number of customers

**Insurance:** promised payment for specific future losses should they occur in exchange for a payment called a premium

**Insurance Policy:** a written contract between an insurer and a customer (the policyholder) describing the term of the insurance, what is covered, the cost of the premium, and the deductible amount

**Insurer:** a company that pays to compensate the policyholder for losses or damages as described in an insurance policy as long as the premium is paid

**Life Insurance:** money paid to a designated beneficiary when the insured person dies

**Marketplace:** the federal website www.healthcare.gov where individuals and small businesses can shop for and purchase health insurance

**Medicaid:** a government-provided health insurance program for individuals with limited income and resources

**Medicare:** a government-provided health insurance program for individuals over age 65 and some younger people with disabilities

**Out-of-Network:** healthcare providers who have not signed a contract to charge negotiated rates with an insurance company

**Out-of-Pocket Maximum:** the maximum amount one must pay for medical expenses; costs above the maximum are covered by the health insurer

Policyholder: the owner(s) of an insurance policy

Premium: the periodic payment for an insurance policy

**Renter's Insurance:** protects one from financial loss if personal property is damaged, destroyed, or stolen

Risk: the probability that something negative may happen



**GLOSSARY** 

