

*Solutions Manual for Personal Finance
2025 Release 1st Edition by Kapoor,
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2025 Release

Chapter 1 Solutions

1. *Calculating the Future Value of Property.* Antonio Lopez plans to buy a house for \$280,000. If that real estate is expected to increase in value by 3 percent each year, what will its approximate value be six years from now?

Solution: \$334,334.64

LO: 1-2

Topic: Calculating the Future Value of Property

LOD: Intermediate

Bloom tag: Application

2. *Using the Rule of 72.* Using the rule of 72, approximate the following amounts.
 - a. If the value of land in an area is increasing 6 percent a year, how long will it take for property values to double?
 - b. If you earn 10 percent on your investments, how long will it take for your money to double?
 - c. At an annual interest rate of 5 percent, how long will it take for your savings to double?

Solution:

a. about 12 years (72/6)

b. about 7.2 years (72/10)

c. about 14.4 years (72/5)

LO: 1-2

Topic: Using the Rule of 72

LOD: Easy

Bloom tag: Application

3. *Determining the Inflation Rate.* In 2020, selected automobiles had an average cost of \$16,000. The average cost of those same automobiles is now \$24,000. What was the rate of increase for these automobiles between the two time periods?

Solution: $(\$24,000 - \$16,000) / \$16,000 = .50$ (50 percent)

LO: 1-2

Topic: Determining the Inflation Rate

LOD: Medium

Bloom tag: Application

4. *Computing Future Living Expenses.* A family spends \$52,000 a year for living expenses. If prices increase by 2 percent a year for the next three years, what amount will the family need for their living expenses after three years?

Solution: \$55,182.82

LO: 1-2

Topic: Computing Future Living Expenses

LOD: Easy

Bloom tag: Application

5. *Calculating Earnings on Savings.* What would be the yearly earnings for a person with \$8,000 in savings at an annual interest rate of 2.5 percent?

Solution: $\$8,000 \times .025 = \200

LO: 1-4

Topic: Calculating Earnings on Savings

LOD: Easy

Bloom tag: Application

6. *Computing the Time Value of Money.* Using a financial calculator or time value of money tables in the Chapter Appendix, calculate the following.
- The future value of \$450 six years from now at 6 percent.
 - The future value of \$800 saved each year for 10 years at 8 percent.
 - The amount a person would have to deposit today (present value) at a 6 percent interest rate to have \$1,000 four years from now.
 - The amount a person would have to deposit today to be able to take out \$500 a year for 10 years from an account earning 7 percent.

Solution:

a. \$638.33

b. \$11,589.25

c. \$792.09

d. \$3,511.79

LO: 1-4

Topic: Computing the Time Value of Money

LOD: Medium

Bloom tag: Application

7. *Calculating the Future Value of a Series of Amounts.* Elaine Romberg prepares her own income tax return each year. A tax preparer would charge her \$70 for this service. Over a period of 10 years, how much does Elaine gain from preparing her own tax return? Assume she can earn 3 percent on her savings.

Solution: $\$70 \times 11.464 = \802.47

LO: 1-4

Topic: Calculating the Future Value of a Series of Amounts

LOD: Difficult

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Bloom tag: Application

8. *Calculating the Time Value of Money for Savings Goals.* If you desire to have \$22,000 for a down payment for a house in five years, what amount would you need to deposit today? Assume that your money will earn 4 percent.

Solution: \$18,082.40

LO: 1-4

Topic: Calculating the Time Value of Money for Savings Goals

LOD: Intermediate

Bloom tag: Application

9. *Calculating the Present Value of a Series.* Callen Patel is planning to go to graduate school in a program of study that will take three years. Callen Pete wants to have \$15,000 available each year for various school and living expenses. If he earns 4 percent on his money, how much must be deposited at the start of his studies to be able to withdraw \$15,000 a year for three years?

Solution: \$41,626.37

LO: 1-4

Topic: Calculating the Present Value of a Series

LOD: Hard

Bloom tag: Application

10. *Using the Time Value of Money for Retirement Planning.* Carla Franz deposits \$3,000 a year into her retirement account. If these funds have an average earning of 9 percent over the 40 years until her retirement, what will be the value of her retirement account?

Solution: \$1,013,647.34

LO: 1-4

Topic: Using the Time Value of Money for Retirement Planning

LOD: Intermediate

Bloom tag: Application

11. *Calculating the Value of Reduced Spending.* If a person spends \$15 a week on coffee (assume \$750 a year), what would be the future value of that amount over 10 years if the funds were deposited in an account earning 3 percent?

Solution: \$8,597.91

LO: 1-4

Topic: Calculating the Value of Reduced Spending

LOD: Easy

Bloom tag: Application

12. *Calculating the Present Value of Future Cash Flows.* A financial company advertises on television that they will pay you \$60,000 now in exchange for annual payments of \$10,000 that you are expected to receive for a legal settlement over the next 10 years. If you estimate the time value of money at 10 percent, would you accept this offer?

Solution:

- (1) calculate the future value of the annual payment: \$159,374.25
- (2) calculate the present value of that future flow: \$61,445.67
- (3) the \$60,000 being offered now is less than the present value of the future flow.

LO: 1-4

Topic: Calculating the Present Value of Future Cash Flows

LOD: Hard

Bloom tag: Application, analysis

13. *Calculating the Potential Future Value of Savings.* Mai Tran plans to set aside \$2,800 a year for the next six years, earning 4 percent. What would be the future value of this savings amount?

Solution: \$18,572.33

LO: 1-4

Topic: Calculating the Potential Future Value of Savings

LOD: Easy

Bloom tag: Application

14. *Determining a Loan Payment Amount.* If you borrow \$8,000 with a 5 percent interest rate, to be repaid in five equal yearly payments, what would be the amount of each payment? (*Note:* Use an online calculator, app, financial calculator, or spreadsheet software.)

Solution: $\$8,000 / 4.329 = \$1,847.80$

LO: 1-4

Topic: Determining a Loan Payment Amount

LOD: Hard

Bloom tag: Application

Chapter 1

Personal Finance Basics and the Time Value of Money

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OVERVIEW OF THE CHAPTER

This chapter provides the foundation for Personal Finance and the study of financial planning. The chapter starts with a discussion of an overview of the financial planning process. This is followed by coverage of the personal, social, and economic factors that make up the financial planning environment. Next, goal setting and the opportunity costs, or trade-offs, of decisions are considered in relation to personal and financial resources. Then, the main components of financial planning (obtaining, planning, saving, borrowing, spending, managing risk, investing, and retirement and estate planning) are discussed. Finally, strategies for creating and using a financial plan are introduced.

1.1 The Financial Decision Process

LO: Implement steps to make personal financial decisions.

When making financial decisions, use various information sources to implement the personal financial planning process: (1) determine your current financial situation, (2) develop financial goals, (3) identify alternative courses of action, (4) evaluate alternatives, (5) create and implement a financial action plan, and (6) review and revise the financial plan.

1.2 Influences on Personal Financial Planning

LO: Analyze personal and economic factors that affect financial decisions.

Financial goals and decisions are affected by a person's life situation (income, age, household size, health), life events, and personal values. Economic factors, such as consumer prices, interest rates, and employment opportunities, also influence your personal financial planning.

1.3 Developing Personal Financial Goals

LO: Create personal financial goals.

Financial goals should take the SMART approach with goals that are: Specific, Measurable, Action-oriented, Realistic, and Time-based. *Short-term goals* will be achieved in two years or less. *Intermediate goals* have a time frame of two to five years. *Long-term goals* involve financial plans of more than five years.

1.4 Opportunity Costs and the Time Value of Money

LO: Calculate time value of money to analyze personal financial decisions.

Every decision involves a trade-off with things given up. Personal opportunity costs include time, effort, and health. Financial opportunity costs are based on the time value of money. Future value and present value calculations enable you to measure the increased value (or lost interest) that results from saving, investing, borrowing, or purchasing decisions.

1.5 Achieving Financial Goals

LO: Identify strategies to achieve financial goals throughout your life.

Successful financial planning requires specific goals combined with spending, saving, investing, and borrowing actions based on your personal situation along with consideration of social and economic factors.

TEACHING RESOURCES

Section	Title
1.1: The Financial Decision Process	<u>Things to Do in Your 20s to Make You Rich in Your 30s</u>
	<u>Wise Personal Financial Actions</u>
	<u>Money Personality Types</u>
	<u>Investment Risk Tolerance Assessment</u>
	<u>Personal Financial Planning Apps</u>
	<u>Financial Planning Checklist</u>
1.2: Influences on Personal Financial Planning	<u>Life Events That Require Financial Planning</u>
	<u>Managing Money During Times of Crisis</u>
	<u>Financial Compatibility Quizzes</u>
	<u>Life Values Quiz</u>
	<u>Inflation Calculator</u>
	<u>Lifestyle Inflation</u>
	<u>Interest Rates and Personal Finances</u>
1.3: Developing Personal Financial Goals	<u>Smart Financial Goals</u>
	<u>Goal-Setting Guidelines</u>
	<u>Money Habits of Different Generations</u>
	<u>Financial Goals for Young Adults</u>
	<u>Non-Financial Goals</u>
1.4: Opportunity Costs and the Time Value of Money	<u>Opportunity Costs</u>
	<u>Time Value of Money Calculator</u>
	<u>Time Value of Money Real World Examples</u>
	<u>Why Time Value of Money Matters</u>
1.5: Achieving Financial Goals	<u>Choosing a Financial Advisor</u>
	<u>Creating a Personal Financial Plan</u>
	<u>Your Financial Well-Being Score</u>
	<u>Financial Health Survey Results</u>
	<u>Financial Literacy Survey</u>
	<u>Successful Financial Planning Actions</u>

1.1 The Financial Decision Process

Pages: 3–9

PowerPoint Slides 3–13

Interactive Resources:

Discussion Questions:

How much do students think their financial success will be affected by their choices in their 20s?

Answers will vary.

Classroom Resources:

[Things to Do in Your 20s to Make You Rich in Your 30s](#)

Are these suggestions realistic for most young people?

[Wise Personal Financial Actions](#)

Have students talk about the suggestions they are currently using.

[Money Personality Types](#)

Have students identify their money personality type and also talk to others about their money type.

[Investment Risk Tolerance Assessment](#)

Have students report and comment on their results of this assessment.

[Personal Financial Planning Apps](#)

Have students talk about the benefits of financial planning apps.

[Financial Planning Checklist](#)

Discuss which items on this list should be given a higher priority.

Connect Resources:

End of Chapter Problems (Static & Algorithmic)

Test Bank Problems (Static & Algorithmic)

Videos with assignable questions:

Personal Financial Planning Process

Section 1.1 Key Concepts:

The Financial Planning Process

- **Personal financial planning** is the process of managing your money to achieve personal economic satisfaction.
- A comprehensive financial plan can enhance the quality of your life and increase your satisfaction by reducing uncertainty about future needs and resources.
- Financial literacy is the use of knowledge and skills for earning, saving, spending, and investing money to achieve personal, family, and community goals.
- The financial planning environment is affected by life situation, personal values, and economic factors.
- Financial activities may be organized based on spending, saving, and sharing.
 - The personal factors include your age, income, size of household, and your attitudes and beliefs. Your life situation is affected by various personal events.
 - Values are personal beliefs and ideas that a person considers correct, desirable, and important.

Exhibit 1-1 explains the six parts of the Financial Planning Process for personal finances.

Step 1: Determine Your Current Financial Situation

- Determine your current financial situation regarding income, savings, living expenses, and debts.

Step 2: Develop Financial Goals

- Analyze your financial values and goals to set a course for action.
- Ideally, you should analyze your financial goals several times a year.

Step 3: Identify Alternative Courses of Action

- Various alternatives associated with financial decision making are usually based on deciding to:
 - Continue the same course of action; for example, you may determine that the amount saved each month is still appropriate.
 - Expand the current situation; you may choose to save a larger amount each month.
 - Change the current situation; you may decide to use a money market account instead of a regular savings account.
 - Take a new course of action; you use your monthly savings budget to pay off credit card debts.
- Creative decision making is vital for effective choices. The more alternatives that are considered, the more likely a person or household will make wise financial choices.

Smart Money Minute covers the topic of lifestyle inflation and the risk of overspending.

Step 4: Evaluate Your Alternatives

- Consequences of Choices: Every decision closes off alternatives. The **opportunity cost** is what a person gives up by making a choice.
- This cost, commonly referred to as the trade-off of a decision, sometimes cannot be measured in dollars.
- Decision making will be an ongoing part of your personal and financial existence. Thus, you will need to consider the lost opportunities that result from your decisions.
- Evaluating Risk: Uncertainty is a part of every decision. In many financial decisions, identifying and evaluating risk is a difficult task. The best way to consider risk in such decisions is to gather information based on your experience and the experience of others and to use financial planning resources (e.g., find research studies regarding how people in society have reacted in similar circumstances).

Exhibit 1-2 offers an overview of the various types of financial risk.

- Financial Planning Information Sources: Valid information is required at each stage of the decision-making process. Changing personal, social, and economic conditions requires that you continually update your knowledge.

Exhibit 1-3 provides a high-level view of the various types of financial planning information sources available to consumers.

Step 5: Create and Implement Your Financial Action Plan

- Develop a plan of action to achieve your goals.
- You may need the help of others to implement your plan.

Step 6: Review and Revise Your Plan

- Decision making is a circular, ongoing process in which current decisions influence future choices.

Personal FinTech introduces readers to FinTech (financial technology) and the types of FinTech that exist.

Practice Quiz 1-1

1. What are the main elements of every decision we make?

Every decision involves identification of the basic problem, generation of alternative courses of action, consideration of personal, social, and economic factors that influence the decision, evaluation of alternative courses of action, selection of the most appropriate one, and implementation of the course of action selected.

2. What are some risks associated with financial decisions?

Common risks associated with financial decisions include inflation risk, interest rate risk, economic risk, and personal risk (see Exhibit 1-2).

3. What are common sources of financial planning information?

The common sources of personal financial planning information are financial experts, print and media materials, school courses and seminars, financial institutions, and digital sources. Refer students to the Appendix A for additional information. The most helpful information sources will depend on a person's need and situation. Magazine articles may be helpful to some, while others may require an online search to gather investment data.

4. Why should you reevaluate your actions after making a personal financial decision?

Too often people think that once a plan is implemented, the work is over. However, we must continually reevaluate our decisions since many factors (our life situation, the economy, and personal goals) can change. In addition, we reassess the situation since the alternative selected may not turn out exactly as planned.

1.2 Influences on Personal Financial Planning

Pages: 9–14

PowerPoint Slides 14–21

Interactive Resources:

Discussion Question:

How would various personal events affect personal financial decisions?

Answers will vary.

Classroom Resources:

[Life Events That Require Financial Planning](#)

Have students discuss actions that might be taken when encountering various life events.

[Managing Money During Times of Crisis](#)

Have students talk to others about the financial difficulties and actions taken during the recent pandemic.

[Financial Compatibility Quizzes](#)

What actions are necessary for a compatible financial relationship?

[Life Values Quiz](#)

Have students take this life values quiz to provide insights regarding their attitudes toward money and personal financial planning.

[Inflation Calculator](#)

Ask students to compare prices for various items today with prices in the past.

[Lifestyle Inflation](#)

What actions would you suggest to avoid lifestyle inflation?

[How Will Interest Rates Affect Me](#)

Have students suggest possible actions when interest rates are rising and falling.

Connect Resources:

End of Chapter Problems (Static & Algorithmic)

Test Bank Problems (Static & Algorithmic)

Videos with assignable questions:

The Financial System

Section 1.2 Key Concepts:

- The financial planning environment is affected by life situation, personal values, and economic factors.

Life Situation and Personal Values

- Personal factors (age, income, household size, and beliefs) influence spending and saving.
- The **adult life cycle**—the stages in the family and financial needs of an adult—is an important influence on your financial activities and decisions.
- **Values** are ideas and principles that a person considers correct, desirable, and important.

Exhibit 1-4 provides an overview of the financial system.

The Financial System and Economic Factors

- A *security* is a financial instrument that represents debt or equity.
- *Debt securities*, such as bonds, represent money borrowed by companies or governments. These debt securities are often bought as an investment.
- *Equity securities* (stock) represent ownership in a corporation.
- Other examples of securities include mutual funds, certificates of deposit (CDs), and commodity futures.
- Economic conditions (supply and demand, prices, and interest rates) and economic institutions (business, labor, and government) also affect personal finance.
- **Economics** is the study of how wealth is created and distributed.
- The price of a specific good or service is determined by supply and demand. Just as high demand for a consumer product forces its price up, a high demand for money forces interest rates up. This price of money reflects both the limited supply of money and the demand for it.
- The Federal Reserve System, *The Fed*, our central banking system, influences the money supply by borrowing funds, changing interest rates, and buying or selling government securities.

Global Influences

- The global economy also influences personal finance. An economy is affected by both the financial activities of foreign investors and competition from global companies.
- The spending by Americans for foreign goods and services and investment in our country by foreign companies affect our interest rates and prices.
- A *trade deficit* also affects the value of a nation's money and the cost of items being purchased by consumers.

Exhibit 1-5 is a table of the various factors that affect economic conditions, what they measure, and how they influence personal financial planning.

Economic Conditions

- Inflation is a rise in the general level of prices; the buying power of the dollar decreases.
- The main cause of inflation is an increase in demand without a comparable increase in supply. Inflation is most harmful to people who live on fixed incomes.
- The rule of 72 can be used to determine how fast prices will double; divide 72 by the current inflation rate. For example, with inflation of 6%, prices will double in 12 years ($72/6 = 12$).
- Consumer spending is the total demand for goods and services in the economy; this influences employment opportunities and potential for income.

How To... shows how taking the easy path in financial decision making can lead to financial difficulties.

- Interest rates represent the cost of money. Like everything else, money has a price. The forces of supply and demand influence interest rates. As the amount saved and invested by consumers increases the supply of money, interest rates tend to decrease.
- But as consumer, business, government, and foreign borrowing increase the demand for money, interest rates also tend to rise.

Practice Quiz 1-2

1. How do age, marital status, household size, employment situation, and other personal factors affect financial planning?

A person's needs, values, and goals are directly related to these demographic factors. As a person's life situation changes, financial goals, spending patterns, need for insurance, and other financial activities will be revised.

2. How might the uncertainty of inflation make personal financial planning difficult?

Inflation can affect financial planning with unexpected higher prices for which a budget was not planned. Or, expected inflation will mean higher interest rates as a lender is concerned about being paid back in dollars with less buying power.

3. What influences the level of interest rates?

Interest rates are affected by the supply and demand for money, along with the risk of lending and borrowing money.

1.3 Developing Personal Financial Goals

Pages: 14–15

PowerPoint Slides 22–24

Interactive Resources:

Discussion Question:

Ask students to describe risks that they think they may encounter when making financial decisions over the next few years.

Answers will vary.

Classroom Resources:

[Smart Financial Goals](#)

Ask students to discuss some of their current and future financial goals.

[Goal-Setting Guidelines](#)

What suggestions do students have for setting personal financial goals?

[Money Habits of Different Generations](#)

Based on the results of this study, suggest actions various groups might take for improved personal money management.

[Financial Goals For Young Adults](#) (video)

What advice in this video do you believe is most valuable for your personal situation?

[Non-Financial goals](#)

Have students list free and low-cost activities that can enhance personal and career development.

Connect Resources:

End of Chapter Problems (Static & Algorithmic)

Test Bank Problems (Static & Algorithmic)

Videos with assignable questions:

Goal Setting Guidelines

Section 1.3 Key Concepts:

- Many Americans have money problems due to poor planning and bad money management decisions.

Types of Financial Goals

- *Short-term goals* are those to be achieved in two years or less, such as saving for a vacation or paying off small debts.
- *Intermediate goals* have a time frame of two to five years.
- *Long-term goals* involve financial plans of more than five years, such as retirement, college savings, or buying a house.

The *Smart Money Minute* feature offers several methods to becoming financially disciplined and achieving financial goals.

Goals for Different Financial Needs

- *Consumable-product goals* usually occur on a periodic basis involving items used up relatively quickly, such as food, clothing, or entertainment activities.
- *Durable-product goals* usually involve infrequent, expensive items, such as appliances, cars, or electronics. Most durable goals consist of tangible items. In contrast, however, many people overlook *intangible-purchase goals*. These goals may relate to personal relationships, health, education, and leisure. Goal setting for these life activities is necessary for a person's overall well-being.

Goal-Setting Guidelines

- Financial goals should take a SMART approach, in that they should be:
 - S**—*specific*, so you know exactly what your goals are.
 - M**—*measurable* with a specific amount.
 - A**—*action-oriented*, involving the personal financial activities to be taken.
 - R**—*realistic*, involving goals based on your income and life situation.
 - T**—*time-based*, indicating a time frame for achieving the goal.

Exhibit 1-6 is a high-level overview of the various financial goals for various life situations.

Financial Literacy for Life provides a SMART format for students to develop financial goals.

Practice Quiz 1-3

1. What are examples of long-term goals?

Long-term goals are financial objectives more than 5 years away, such as retirement savings, money for children's college education, or buying a house.

2. What are the five main characteristics of useful financial goals?

Useful financial goals should be (1) specific, (2) measurable, (3) action-oriented, (4) realistic, and (5) time-based.

1.4 Opportunity Costs and the Time Value of Money

Pages: 15–20

PowerPoint Slides 25–33

Interactive Resources:

Discussion Questions:

Ask students what they think are possible drawbacks associated with not considering opportunity costs and time value of money when making financial decisions.

Answers will vary.

What factors in an economy might affect the level of interest rates?

Answers will vary.

Classroom Resources:

Opportunity Costs (video)

Have students list various personal and financial opportunity costs in their lives.

Time Value of Money Calculator

Have students calculate the present value and future value for various personal financial decisions.

Time Value of Money Real World Examples

Have students describe situations when they might use time value of money calculations.

Why Time Value of Money Matters

Have students discuss the benefits of time value of money calculations.

Connect Resources:

End of Chapter Problems (Static & Algorithmic)

Test Bank Problems (Static & Algorithmic)

Videos with assignable questions:

Future Value—Annuity

Future Value—Single Amount

Present Value—Annuity

Present Value—Single Amount

Section 1.4 Key Concepts:

- In every financial decision, you will sacrifice something to obtain something else that you consider desirable. *Opportunity costs* may be viewed in terms of both personal and financial resources.

Exhibit 1-7 points out the opportunity costs, financial and personal, when making financial decisions.

Personal Opportunity Costs

- The most common personal opportunity cost is time.
- Time spent in studying, working, or shopping cannot be used for other activities.
- Like financial resources, your personal resources (time, energy, health, abilities, knowledge) require careful management.

Financial Opportunity Costs

- Like time, money allocated for one purpose cannot be used for another.
- The *time value of money* refers to the increase of an amount of money because of interest earned.

Interest Calculations

- Computation of interest is based on:
 - the amount of the savings (principal)
 - the annual interest rate
 - the length of time the money remains deposited.
- Three main tools are available for calculating time value of money: online calculators and apps, spreadsheet software, and a financial calculator.

Future Value of a Single Amount

- *Future value* is the amount to which current savings will grow based on a certain interest rate and a certain time period.
- For example, \$100 deposited in a 4 percent account for 1 year will grow to \$104. This amount is computed as follows:
- $\text{Future value} = \$100 + (\$100 \times 0.04 \times 1 \text{ year}) = \104
- Compounding allows the future value of a deposit to grow faster than if interest were paid only on the original deposit.

Money Math presents examples of using time value of money to achieve financial goals.

Future Value of a Series of Deposits

- An annuity is a series of equal deposits or payments. To determine the future value of equal yearly savings deposits, time value of money calculators can be used.
- For example, if you deposit \$50 a year at 7% for 6 years, starting at the end of the first year, you will have \$357.65 at the end of that time ($\$50 \times 7.153$).

Present Value of a Single Amount

- *Present value*, also referred to as *discounting*, is the current value for a future amount based on a certain interest rate for a certain period of time. Present value computations may also be used for both a single amount and a series of amounts.

Present Value of a Series of Deposits

- Present value computations may also be used to determine how much you need to deposit now so that you can withdraw a certain amount for a set number of years.
- For example, if you want to take \$400 out of an investment account each year for nine years and your money is earning an annual rate of 8 percent, that would require a current deposit of \$2,498.76.

Smart Money Minute feature shows how an annual investment of \$2,000 per year grows over time.

Practice Quiz 1-4

1. How can future value and present value computations measure the opportunity cost of a financial decision?

Time value of money calculations (future value and present value) are used to compute interest earned and the value of a sum of money at a later date.

2. Use a financial calculator, app, or online calculator to calculate the following:
 - a. The future value of \$100 at 7 percent in 10 years.
Using Excel: =FV (0.07, 10, 0, -100) = \$196.72
 - b. The future value of \$100 a year for six years earning 6 percent.
Using Excel: =FV (0.06, 6, -100, 0) = \$697.53
 - c. The present value of \$500 received in eight years with an interest rate of 8 percent.
Using Excel: =PV (0.08, 8, 0, -500) = \$270.13

1.5 Achieving Financial Goals

Pages: 20–25

PowerPoint Slides 34–40

Interactive Resources:

Discussion Questions:

Ask students to discuss what actions they plan to take in the next week to set themselves up on a path to achieving a financial goal.

Answers will vary.

Classroom Resources:

[Choosing a Financial Advisor](#) (video)

Have students create a list of questions to ask when selecting a financial advisor.

[Creating a Personal Financial Plan](#)

What actions are commonly overlooked when doing financial planning?

[Your Financial Well-Being Score](#)

Have students take this assessment and develop a personal plan for their financial planning activities.

[Financial Health Survey Results](#)

What actions would you recommend to businesses, government, and community organizations based on the findings in this study?

[Financial Literacy Survey](#)

Have students take this financial literacy assessment to determine their current level of knowledge.

[Successful Financial Planning Actions](#)

Which actions in the article would be most beneficial to your personal situation?

Connect Resources:

End of Chapter Problems (Static & Algorithmic)

Test Bank Problems (Static & Algorithmic)

Section 1.5 Key Concepts:

- Throughout life, each individual's needs will usually be satisfied with wise use of financial resources. Financial planning involves deciding how to obtain, protect, and use those resources.

Exhibit 1-8 shows the components of personal financial planning and the chapters of this book in which they are discussed.

Components of Personal Financial Planning

- The eight major components of personal financial planning are:
 1. Obtaining financial resources
 2. Planning for current living expenses and future financial security
 3. Saving for emergencies, unexpected bills, replacement of major items, special purchases, and liquidity
 - *Liquidity* is the ability to readily convert financial resources into cash without a loss in value.
 4. Borrowing in a responsible manner
 5. Purchasing to meet daily living needs
 6. Managing risk through insurance decisions
 7. Investing for long-term financial security
 8. Retirement and estate planning

Smart Money Minute feature points out how your education can be a significant investment and various funding alternatives for paying for the costs of school.

Developing a Flexible Financial Plan

- A *financial plan* is a formalized report that summarizes your current financial situation, analyzes your financial needs, and recommends a direction for your financial activities.
- Financial activities may be organized on the basis of spending, saving, investing, and borrowing decisions.

Exhibit 1-9 shows what financial planning process looks like in action.

Implementing Your Financial Plan

- The most important strategy for success is the development of financial habits that will contribute to both short-term satisfaction and long-term financial security.
- Using a set spending plan will help you stay within your income while you save and invest for the future.

Studying For Financial Success

- Read and study the book; use the Practice Quizzes and end-of-chapter problems & activities.
- Use online sources and apps for the latest information.
- Talk to family members, friends, financial experts, and others who have knowledge of various money topics.

- Search online for answers to questions that result from your desire to know more.

Smart Money Minute feature discusses the common mistake of a low desire to learn and how to achieve personal financial success.

Financial Literacy for Life provides a ten-question assessment for your financial health.

Practice Quiz 1-5

1. What are the main components of personal financial planning?

The main components of financial planning are obtaining, planning, saving, borrowing, spending, managing risk, investing, and retirement and estate planning.

2. What is the purpose of a financial plan?

A financial plan provides a person with an overall summary of current and desired financial situations along with planned actions to reach those goals.

3. Describe actions that might be taken to achieve financial goals.

Common financial planning strategies include developing a savings plan, investing in stocks and bonds, purchasing real estate for investment purposes, planning investment and other financial decisions with taxes in mind, limiting the use of credit, and investing in a variety of investment vehicles.

Concluding Activities

- Use the “Your Personal Finance Roadmap and Dashboard” feature to highlight career planning activities for various ages and life situations.
- Point out the summary of learning objectives and key terms in the text margin.
- Discuss selected end-of-chapter Self-Test Problems, Financial Planning Problems, Fintech Literacy, A Real-Life Case, and Continuing Case.
- Have students apply their learnings to their own finances using the Your Personal Financial Plan and Track Your Spending end-of-chapter activities.
- Use the Chapter Quiz in the *Instructor’s Manual*.

CHAPTER 1 QUIZ ANSWERS

True/False

1. T
2. F
3. T
4. T
5. F

Multiple Choice

6. B
7. C
8. D
9. A
10. B

Name _____

Date _____

CHAPTER 1 QUIZ

TRUE/FALSE

- _____ 1. A major purpose of personal financial planning is future economic security.
- _____ 2. Personal financial planning starts by creating a plan of action.
- _____ 3. Inflation reduces the buying power of a dollar.
- _____ 4. Savings and investment programs are the main method for achieving financial goals.
- _____ 5. A financial plan is a list of a family's spending for the next month.

MULTIPLE CHOICE

- _____ 6. Opportunity cost refers to _____
 - a. your personal values.
 - b. trade-offs when a decision is made.
 - c. current economic conditions.
 - d. commonly accepted financial goals.
- _____ 7. The final step in the financial planning process is to _____
 - a. create a financial plan of action.
 - b. develop financial goals.
 - c. review and revise your actions.
 - d. implement your financial plan.
- _____ 8. Economics refers to _____
 - a. setting personal financial goals.
 - b. planning future financial security.
 - c. changes in prices due to supply and demand.
 - d. the study of wealth.
- _____ 9. Career planning is the part of the _____ component of financial planning.
 - a. obtaining
 - b. sharing
 - c. saving
 - d. planning
- _____ 10. Financial strategies refer to _____
 - a. the process of predicting your future financial situation.
 - b. courses of action to achieve financial goals.
 - c. resources an individual has available for investing.
 - d. ideas or principles that are considered correct, desirable, or important.

Supplemental Activity 1

Financial Planning Through the Your Life

People in their 20s–30s should...

- start saving regularly and invest for the long haul for retirement, children's education, or a down payment on a house.
- make contributions to tax-deductible retirement plans.
- create a diversified portfolio of common stock.
- have adequate health and property insurance; however, consider going without life insurance if they have no dependents.

People in their 40s–50s should...

- maximize contributions to tax-advantaged retirement plans.
- plan for adequate funds for children's college education.
- use stocks and stock funds for the largest share of long-term investments.
- review life, health, and home insurance for adequate coverage.

People 50-plus should...

- not feel they have to preserve all their wealth for others.
- be careful about retiring too young and not have adequate funds for what may be 30 more years.
- maintain earnings potential with a part-time job after retirement.
- not put all funds in fixed-income securities such as bank accounts and bonds.
- consider a long-term care insurance policy.

Supplemental Activity 2

The Certified Financial Planner Board of Standards conducted a survey of financial planning practitioners to identify common mistakes of their clients. Below are the 11 most common responses. Guess their correct order, ranking them highest to lowest.

- ___ Believe that financial planning is primarily tax planning.
- ___ Make a financial decision without understanding its effect on other financial issues.
- ___ Confuse financial planning with investing.
- ___ Don't set measurable financial goals.
- ___ Think that financial planning is only for the wealthy.
- ___ Expect unrealistic return on investments.
- ___ Neglect to reevaluate their financial plan periodically.
- ___ Think that financial planning is the same as retirement planning.
- ___ Think that using a financial planner means losing control of their decisions.
- ___ Wait until they have a money crisis to begin financial planning.
- ___ Think that financial planning is something you can do when you get older.

Answers:

The correct order is:

1. Don't set measurable financial goals.
2. Make a financial decision without understanding its effect on other financial issues.
3. Confuse financial planning with investing.
4. Neglect to reevaluate their financial plan periodically.
5. Think that financial planning is only for the wealthy.
6. Think that financial planning is something you can do when you get older.
7. Think that financial planning is the same as retirement planning.
8. Wait until they have a money crisis to begin financial planning.
9. Expect unrealistic return on investments.
10. Think that using a financial planner means losing control of their decisions.
11. Believe that financial planning is primarily tax planning.

FINANCIAL PLANNING PROBLEMS

(Note: Some of these problems require the use of an online calculator, app, financial calculator, or spreadsheet software.)

1. *Calculating the Future Value of Property.* Antonio Lopez plans to buy a house for \$280,000. If that real estate is expected to increase in value by 3 percent each year, what would its approximate value be six years from now? (LO 1.2)

Using Excel: =FV (0.03, 6, 0, -280000) = \$334,335

2. Using the rule of 72, approximate the following amounts (LO 1.2):
 - a. If the value of land in an area is increasing 6 percent a year, how long will it take for property values to double?
 - b. If you earn 10 percent on your investments, how long would it take for your money to double?
 - c. At an annual interest rate of 5 percent, how long would it take for your savings to double?
 - a. About 12 years (72/6)
 - b. About 7.2 years (72/10)
 - c. About 14.4 years (72/5)

3. *Determining the Inflation Rate.* In 2020, selected new automobiles had an average cost of \$16,000. The average cost of those same automobiles is now \$24,000. What was the rate of increase for these automobiles between the two time periods? (LO 1.2)

$(\$24,000 - \$16,000)/\$16,000 = 0.50$ (50%)

4. *Computing Future Living Expenses.* A family spends \$52,000 a year for living expenses. If prices increase by 2 percent a year for the next three years, what amount will the family need for their living expenses after three years? (LO 1.2)

Using Excel: =FV (0.02, 3, 0, -52000) = \$55,183

5. *Calculating Earnings on Savings.* What would be the yearly earnings for a person with \$8,000 in savings at an annual interest rate of 2.5%? (LO 1.4)

$\$8,000 \times 0.025 = \200

6. *Computing the Time Value of Money.* Using an online calculator, app, financial calculator, or spreadsheet software, calculate the following (LO 1.4):
 - a. The future value of \$450 six years from now at 6 percent.
 - b. The future value of \$800 saved each year for 10 years at 8 percent.

- c. The amount that a person would have to deposit today (present value) at a 6 percent interest rate to have \$1,000 four years from now.
- d. The amount that a person would have to deposit today to be able to take out \$500 a year for 10 years from an account earning 7 percent.

- a. $=FV(0.06, 6, 0, -450) = \638.33
- b. $=FV(0.08, 10, -800, 0) = \$11,589.25$
- c. $=PV(0.06, 4, 0, -1000) = \792.09
- d. $=PV(0.07, 10, -500, 0) = \$3,511.79$

7. *Calculating the Future Value of a Series of Amounts.* Elaine Romberg prepares her own income tax return each year. A tax preparer would charge her \$70 for this service. Over a period of 10 years, how much does Elaine gain from preparing her own tax return? Assume she can earn 3 percent on her savings. (LO 1.4)

$$=FV(0.03, 10, -70, 0) = \$802.47$$

8. *Calculating the Time Value of Money for Savings Goals.* If you desire to have \$20,000 for a down payment for a house in 5 years, what amount would you need to deposit today? Assume that your money will earn 4%. (LO 1.4)

$$=PV(0.04, 5, 0, -22000) = \$18,082$$

9. *Calculating the Present Value of a Series.* Callan Patel is planning to go to graduate school in a program of study that will take three years. Callan wants to have \$15,000 available each year for various school and living expenses. If he earns 4 percent on his money, how much must be deposited at the start of his studies to be able to withdraw \$15,000 a year for three years? (LO 1.4)

$$=PV(0.04, 3, -15000, 0) = \$41,626$$

10. *Using the Time Value of Money for Retirement Planning.* Carla Franz deposits \$3,000 a year into her retirement account. If these funds have an average earning of 9 percent over the 40 years until her retirement, what will be the value of her retirement account? (LO 1.4)

$$=FV(0.09, 40, -3000, 0) = \$1,013,647$$

11. *Calculating the Value of Reduced Spending.* If a person spends \$15 a week on coffee (assume \$750 a year), what would be the future value of that amount over 10 years if the funds were deposited in an account earning 3 percent? (LO 1.4)

$$=FV(0.03, 10, -750, 0) = \$8,598$$

12. *Calculating the Present Value of Future Cash Flows.* A financial company that advertises on television will pay you \$60,000 now in exchange for annual payments of \$10,000 that you are expected to receive for a legal settlement over the next 10 years. If you estimate the time value of money at 10 percent, would you accept this offer? (LO 1.4)

- (1) Calculate the future value of the annual payment: $=FV(0.10, 10, -10000, 0) = \$159,374$
- (2) Calculate the present value of that future flow: $=PV(0.10, 10, 0, -159374) = \$61,446$
- (3) Compare: The \$60,000 being offered now is less than the present value of the future flow, so you would not accept this offer.

13. *Calculating the Potential Future Value of Savings.* Mai Tran plans to set aside \$2,800 a year for the next six years, earning 4 percent. What would be the future value of this savings amount? (LO 1.4)

$$=FV(0.04, 6, -2800) = \$18,572$$

14. *Determining a Loan Payment Amount.* If you borrow \$8,000 with a 5 percent interest rate to be repaid in five equal yearly payments, what would be the amount of each payment? (Note: Use an online calculator, app, financial calculator or spreadsheet software.) (LO 1.4)

Using Excel: $=PMT(0.05, 5, -8000) = \$1,848$

A Real-Life Case

1. For each situation, identify the main financial planning issues that need to be addressed?

Situation 1: Fran and Ed must balance their current living expenses with increasing college costs, covering long-term care facility living expenses for Fran's mother, and saving for retirement.

Situation 2: Patrick needs to consider his spending activities in relation to the money he has available in his emergency fund, while also taking actions related to finding employment.

Situation 3: Nina must decide whether to spend or save these funds, and how. She should consider various alternatives for both short-term and long-term financial decisions.

2. What additional information would you like to have before recommending actions in each situation?

Situation 1: Information for this situation might include: Fran and Ed's current ability to contribute to both a college savings fund and deposits to their retirement account, mortgage and other debts, and potential for reducing current living expenses and increasing current income.

Situation 2: Knowing the additional training background and job skills of Patrick, along with information about his network of contacts and employment opportunities in the area, would be of value to guide his next actions.

Situation 3: Information about Nina's debts, current spending needs, and long-term financial goals would be of value to guide her decision. Also, using time value of money calculations to determine the future value of various savings and investment decisions, as well using present value calculations to determine amounts that should be saved to achieve various financial goals, might be considered.

3. Based on the information provided and your assessment of the situation, what actions would you recommend for the Blakes, Patrick, and Nina?

Situation 1: The Blakes need to continue to set aside funds for the education of their children and make deposits to their retirement fund. The family may also consider actions for reducing current living expenses and increasing household income.

Situation 2: Patrick might be in contact with his professional and personal network of contacts to obtain information about employment opportunities. He might also take actions to reduce unnecessary spending and consider part-time employment. Also, doing volunteer work and community service during this time could expand his resume and increase his network of career contacts.

Situation 3: As noted in the case, possible actions might relate to paying off credit card bills, saving a down payment on a house, making a deposit to a tax-deferred retirement account, obtaining additional career training, and making charitable contributions. Student choices will vary; be sure students give specific reasons for actions they propose.

Continuing Case

- Using *Your Personal Plan Sheet 3*, Personal Financial Goals, as a guide, what are Jamie Lee's short-term financial goals? How do they compare to her intermediate financial goals?

As stated in the text, financial goals should take the SMART approach: **S**pecific, **M**easurable, **A**ction-oriented, **R**ealistic, and **T**ime-based.

Jamie Lee's Short-Term Financial Goals Include	Jamie Lee's Intermediate Financial Goals Include
Depositing \$1,800 per year in her savings account	Saving \$9,000 needed to open a cupcake café within the next 5 years
Paying \$50 per month toward her credit card balance in order to eliminate the balance	

- Review Jamie Lee's current financial situation. Using the SMART approach, what recommendations would you make for her to achieve her long-term goals?

Student responses will vary, but may include:

Jamie Lee will save an additional \$20 per month in her savings account to reduce the student loan debt amount.

Jamie Lee will remain living with a roommate and sharing expenses for the next 5 years.

- Name two opportunity costs that might be considered in Jamie Lee's situation?

Student responses will vary but may include various answers that will demonstrate what Jamie Lee may sacrifice in order to obtain something else:

- Jamie Lee will remain living with a roommate in order to save money and not be able to consider a place of her own.
- Jamie Lee will not have free time to spend with friends while balancing a part-time job and full-time college courses.

- Jamie Lee needs to save a total of \$9,000 in order to get started in her cupcake café venture. She is presently depositing \$1,800 a year in a regular savings account earning 2 percent interest.

Using *Personal Financial Planner Sheet 5*, Time Value of Money, as a guide, how much will she have accumulated five years from now in the regular savings account, assuming she leaves her emergency fund savings account balance untouched?

Jamie is depositing \$1,800 per year for 5 years in her “special” savings account that is earning a constant 2% interest per year. She will need to find out what is the future value of a series of deposits in order to know if she has the \$9,000 down payment needed.

Using Excel: =FV (0.02, 5, -1800, 0) = \$9,367.27

Jamie Lee will have enough saved in 5 years to have the \$9,000 down payment needed to open her cupcake café.