# **Chapter 1—Solutions Manual**

Beginning Your Financial Journey: The Interior Finance Point of View

# Introduction to Personal Finance: Beginning Your Financial Journey By John Grable and Lance Palmer

### **Learning Objectives**

- 1.1 Describe how your financial knowledge, experience, risk tolerance, and feelings of control influence the way you view the financial world.
- 1.2 Explain how your human and social capital relate to your financial well-being.
- 1.3 Discuss how financial risk tolerance relates to financial goal achievement.
- 1.4 Use your unique time perspective to create SMART financial goals.
- 1.5 Describe strategies to overcome mental biases and improve financial decision making and well-being.

### **Key to metadata for questions:**

LO: Learning objective number

BT: Bloom's taxonomy [Knowledge (K), Comprehension (C), Application (Ap), Analysis (An),

Synthesis (S), Evaluation (E)]

Diff: Difficulty level [Easy (E), Medium (M), Hard (H)]

TOT: Expected time for student to complete

AACSB: Communication (C), Ethics (E), Analytic (A), Technology (T), Diversity (D),

Reflective Thinking (RT), Not Applicable (n/a)

#### Sample rubric for writing questions:

Note: It is generally recommended that the rubric be shared with students, so it should be sufficiently general to not give away answers.

#### **Notes for instructor:**

Each writing question will have criteria which are specific to the question. The instructor may want to add or delete grading criteria (rows) depending on the topic and assignment. How each grading criterion will be assessed and the associated points for each level of performance are found in columns 2–5.

In the sample rubric, a total of 16 points are possible for this assignment. Each grading criterion (row) is worth up to 4 points (column 2).

**Rubric:** (It is suggested that the rubric be shared with the students.)

Criteria	Full points (4 out of 4)	75% of points (3 out of 4)	50% of points (2 out of 4)	25% of points (1 out of 4)
Thoroughness of answer to the question	The question is answered thoroughly	The response is lacking a few details	The response is lacking significant details	The response is incomplete and limited
Answer is realistic/relevant	relevant and	Some of the response is irrelevant to the question	Much of the response is irrelevant, unrealistic, or overly simplistic	The response does not represent realistic or relevant understanding of topic
Organization/clarity of thought (25% of score)	Well organized	Adequate organization	Limited organization	Poor organization
Appropriate recommendations and conclusions are reached (25% of score)	is presented that is	Conclusion or recommendation	Conclusion or recommendation is incomplete	No conclusion or recommendation is provided

Please refer to the sample writing assignment rubric in the solutions manual.

# 1.1 Describe how your financial knowledge, experience, risk tolerance, and feelings of control influence the way you view the financial world.

# 1.1 Multiple-Choice Questions

1. b. how well you understand personal finance information.

Answer: b; Section: 1.1; LO: 1.1; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

2. c. I and II only.

Answer: c; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

3. d. your financial knowledge, financial risk-taking, and feelings of control over your situation.

Answer: d; Section: 1.1; LO: 1.1; BT: K; Diff: E; TOT: 2 min; AACSB: RT

4. c. believe strongly in luck and fate

Answer: c; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: RT

5. a. more knowledgeable about the financial marketplace over time and increase his personal wealth.

Answer: a; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: RT

6. c. Having and raising a child.

Answer: c; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

7. a. Consumer spending.

Answer: a; Section: 1.1; LO: 1.1; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

8. b. GDP would fall because consumers would spend less on goods and services.

Answer: b; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: RT

9. a. A willingness to save money on a regular basis.

Answer: a; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

10. c. Michelle, who gives regularly to charity, reads about investing and is self-confident.

Answer: c; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

### 1.1 Adventures in Personal Finance

#### **Short Answer**

1. Answer: High-quality responses should include a discussion of how the wealth was accumulated, work effort, and locus of control (chance versus work), and also include a discussion of the student's perception of his or her locus of control. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.1; LO: 1.1; BT: C; Diff: M; TOT: 15 min; AACSB: RT, E

2. Answer: Risk tolerance describes your willingness to engage in financial activities that have uncertain outcomes. Individuals with low risk tolerance may be fearful of the financial markets and financial activities and avoid them. As your financial literacy increases and risk perceptions are properly understood, your willingness to engage in risks may increase.

Section: 1.1; LO: 1.1; BT: Ap; Diff: M; TOT: 5 min; AACSB: RT, A

3. Answer: High-quality responses should include a discussion of how savings behavior may differ between generations. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.1; LO: 1.1; BT: Ap or An; Diff: M; TOT: 20 min; AACSB: RT, D

4. List 10 life events and occurrences, and identify whether they require any short-term or long-term financial resources.

Section: 1.1; LO: 1.1; BT: Ap; Diff: M; TOT: 20 min; AACSB: n/a

### **Explore**

1. Visit the **U.S. Census Bureau** website and locate the Real Gross Domestic Product, Chained (2005) Dollars—Annual Percent Change: 1990 to 2010 table. The table provides data showing the percent change in GDP from one year to the next. Look specifically for the years 2006, 2007, 2008, and 2009 (these years represent what has since been termed the Great Recession). What happened to national GDP during those years? What might explain the data?

Answer: GDP decreased during this time period. A recession is a decrease in GDP.

Section: 1.1; LO: 1.1; BT: An; Diff: E; TOT: 10 min; AACSB: A

2. Conduct an Internet search using the phrase "financial literacy." What type of programs, study materials, and quizzes are available for free? Share your best findings with others in class.

Answer: High-quality responses should include a discussion of material that the student found as well as the student's assessment of that material. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 20 min; AACSB: T

3. The National Football League (NFL) and Visa, Inc. have teamed up to promote financial literacy. You can play a realistic football game online either against the computer or a friend. Visit the game's website by searching the Internet for "practical money skills training camp." Next, play a short 5- or 10-minute game. To progress downfield and score points you must answer financial literacy questions. At the end of the game assess how well you did, both in points and questions answered correctly. Do you think this type of game would help others learn about financial issues? Why or why not?

Answer: High-quality responses should include a discussion of how well the student performed in the game and the student's assessment whether this type of learning platform is helpful for others. Students should justify their responses. Please refer to the sample writing assignment rubric in the solutions manual.

# 1.1 Expanded Learning Activity

Visit Google Scholar and enter "financial literacy" as a keyword search. Choose a paper that matches the search. Read the paper and write a short (300- to 500-word) reaction to the paper. Note that these are research papers, which means that most have references to statistics and other quantitative analyses. When writing your reaction, focus on the key results related to financial literacy rather than the methods used by the paper's authors.

Answer: High-quality responses should discuss the results of the research and how those results relate to financial planning. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.1; LO: 1.1; BT: Ap; Diff: H; TOT: 120 min; AACSB: C

### 1.1 Practice Questions

- 1. Which of the following elements influence your view of the financial world?
  - I. Your risk tolerance.
  - II. How much you believe you control your financial future.
  - III. Knowledge about personal finance topics.
  - a. II only.
  - b. II and III only.
  - c. I and II only.
  - d. I, II, and III.

Answer: d; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: RT

- 2. Someone who feels that investing is too difficult to understand likely
  - a. has a lower level of financial literacy.
  - b. is positioned to maximize lifetime wealth accumulation goals.
  - c. has a high tolerance for financial risk.
  - d. feels in control of his or her financial situation.

Answer: a; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

- 3. Why might some people who are nearing retirement feel less confident about their financial future?
  - a. They have too much debt.
  - b. They have not saved enough over their lifetime.
  - c. They live too frugally and cannot enjoy the joys of retirement.
  - d. Both they have too much debt and they have not saved enough over their lifetime.

Answer: d; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

- 4. Someone who reports strongly agree with (a) the thought of taking a risk is exciting to me, (b) in terms of investing, high returns are more important than safety, and (c) making money in stocks and bonds is based on knowledge is most likely
  - a. willing to take more financial risk.
  - b. willing to take no financial risk.
  - c. believing in luck and fate.

d. feeling that he or she cannot control his or her financial future.

Answer: a; Section: 1.1; LO: 1.1; BT: C; Diff: M; TOT: 2 min; AACSB: n/a

- 5. All of the following are pathways to wealth, except
  - a. saving money on a regular basis.
  - b. keeping good records.
  - c. spending less than income earned.
  - d. minimizing insurance expenditures.

Answer: d; Section: 1.1; LO: 1.1; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

### 1.2 Explain how your human and social capital relate to your financial well-being.

# 1.2 Multiple-Choice Questions

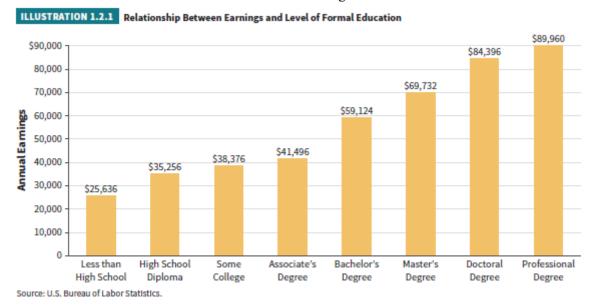
1.

1. b. human capital.

Answer: b; Section: 1.2; LO: 1.2; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

#### 2. b. Michelle.

Answer: b; Section: 1.2; LO: 1.2; BT: Ap; Diff: M; TOT: 2 min; AACSB: RT Solution: Human capital is your ability and willingness to work, learn, earn, and make wise decisions about how to save and invest money. Earnings are often closely associated with your level of formal education (see Illustration 1.2.1). Holding an advanced degree is often a pathway to higher income and human capital. Those with an advanced academic degree tend to do better when the economy turns downward. Michelle does not have an advanced degree.



3. a. Healthy people spend more money on food and exercise, which reduces their lifetime wealth accumulation.

Answer: a; Section: 1.2; LO: 1.2; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

4. c. Tammy.

Answer: c; Section: 1.2; LO: 1.2; BT: Ap; Diff: M; TOT: 2 min; AACSB: RT

Solution: In addition to education, your health affects human capital in both the short run and the long run. Generally, healthy people work more hours and for a longer period of years over their life span compared to those with health problems. Thus, healthy people tend to earn more money on an annual basis, as well as over their lifetimes. Poor health may result in a lower standard of living across the life span. Actively managing your health by eating a healthy diet, avoiding substance abuse, and preventing and minimizing accidents (by wearing your seat belt and never texting while driving) all add up to a healthy lifestyle that will extend your life and increase your human capital. Lance is a smoker, and Rob regularly texts while driving.

- 5. a. Relocate to a place where his welding skills will be valued in the marketplace. Answer: a; Section: 1.2; LO: 1.2; BT: C; Diff: E; TOT: 2 min; AACSB: RT
  - 6. a. Converting human capital to financial wealth depends on wise planning and management.

Answer: a; Section: 1.2; LO: 1.2; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

7. b. Jorge.

Answer: b; Section: 1.2; LO: 1.2; BT: Ap; Diff: M; TOT: 2 min; AACSB: RT

Solution: Unlike human capital, social capital is not found in individuals themselves but rather in the space between individuals or the network of connections among people. Your social capital is shaped by informal and formal networks, like Jorge's fraternity.

8. a. A formal network

Answer: a; Section: 1.2; LO: 1.2; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

9. b. Option 2.

Answer: b; Section: 1.2; LO: 1.2; BT: Ap; Diff: E; TOT: 2 min; AACSB: A

Solution: Option 2 has a \$40,000/year payback, where Option 1 only has a \$35,000/year payback.

The higher payback amount will achieve a quicker breakeven.

WileyPlus Version – #9 Multiple-Choice.

Answer: Reconsider her decision (chosen area of study or school) because the cost is high compared to her potential earnings.

Solution: Your earnings are an indicator of the value of your human capital in the labor market. While earnings are often closely associated with your level of formal education, the supply and demand for a particular skill or knowledge will ultimately determine the relative value. For example, a physician is clearly more valuable than an anthropologist and is reflected in typical earnings.

10. d. only go back to school if the time and effort will result in an increase in personal satisfaction and fulfillment.

Answer: d; Section: 1.2; LO: 1.2; BT: Ap; Diff: M; TOT: 2 min; AACSB: RT

Solution: Regardless of the type of school or educational program you are interested in pursuing, you would be wise to compare the cost of the program to the additional annual income you'll earn once you have completed it. You can use the following formula to estimate how long it will take you to earn back your investment. This is called the investment payback period. The longer the payback period, the more you should question the economic value of your investment.

$$Payback \ period = \frac{Total \ costs}{Increase \in annual \ income}$$
 
$$Payback \ period = \frac{\$75,000 \ cost \ of \ degree + \$50,000 \ lost \ annual \ wages}{\$55,000 \ new \ earnings - \$50,000 \ past \ earnings} = 25 \ years$$

It turns out that it is going to take Ruby about 25 years to break even on her investment, which is 8 years past her expected retirement at 67 years of age. The payback period is helpful in making

education decisions, but it shouldn't be the only factor considered. For example, the investment payback period calculation doesn't account for the value of Ruby's human and social capital that she'll obtain by finishing school. There's also the personal feeling of satisfaction that is hard to value.

### 1.2 Adventures in Personal Finance

#### **Short Answer**

1. Answer: High-quality responses should address the specific questions. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.2; LO: 1.2; BT: Ap; Diff: M; TOT: 15 min; AACSB: RT

2. Answer: High-quality responses should include a discussion of protection measures such as seat belts, exercise/good health practices, safe driving, and stress management. Responses may also include health insurance, life insurance, disability insurance, and other forms of insurance on the individual (NOT property insurance). Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.2; LO: 1.2; BT: Ap; Diff: M; TOT: 20 min; AACSB: RT

3. Answer: High-quality responses should include a discussion of whom these relationships are with and how those relationships can be strengthened. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.2; LO: 1.2; BT: An; Diff: M; TOT: 30 min; AACSB: RT, C

4. Answer: e—1; b—2; h—3; a—4; g—5; j—6; f—7; i—8; d—9; c—10. Solution: (1) physician, (2) dentist, (3) lawyer, (4) personal financial advisor, (5) construction manager, (6) electrical engineer, (7) police officer, (8) kindergarten teacher, (9) social worker, (10) massage therapist.

Section: 1.2; LO: 1.2; BT: Ap; Diff: M; TOT: 5 min; AACSB: RT

### **Explore**

- 1. Take an inventory of your assets—the things you own. What approximately are they worth? Now calculate the value of your human capital? A rough estimate of your human capital is your annual pay (or expected annual pay after you graduate) divided by .06. How does this number compare to the value of your other assets? Summarize your calculations and write one to two paragraphs on what you found.
  - Answer: High-quality responses should include a discussion of the student's estimated human capital and how it compares with his or her other assets. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.2; LO: 1.2; BT: An; Diff: H; TOT: 40 min; AACSB: RT, C, A

2. Conduct an internet search using your name as the search term. Based on what you see about yourself, would you feel comfortable if you knew your current and future employers were looking at the same material, including social media webpage(s)? Would they conclude that you are professional and a perfect candidate for the job, or would they have reservations? Do you think the image portrayed of you is accurate? If not, what do you need to change? Answer: High-quality responses should include a discussion of how the student perceives his or her online image and how it could be improved or maintained. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.2; LO: 1.2; BT: An; Diff: M; TOT: 20 min; AACSB: RT, T

# 1.2 Expanded Learning Activity

Estimate the payback period for your educational investment. Specifically, calculate how much tuition, books, fees, and other expenses will be before you complete your desired schooling. Do not include these expenses if someone else is paying these bills (grants, scholarships, employer, and parents). Add in any student loans you have taken out. You can also include what you would be making if you were working instead of attending school, but only if you would be working. The total approximates your investment in education.

Next, look at what you realistically will be earning after you graduate in your desired field. Use information from the **U.S. Census Bureau**, **Bureau** of **Labor Statistics**, and your school's career center to determine your likely annual salary. Subtract this from what you would earn without your degree (use the minimum wage or approximate a wage of \$10 per hour). The difference is the ballpark annual return on investment. Divide the total costs by the annual increase in earnings, and this is your payback period.

- a. How long will it take you to payback the investment, or earn back all of the money you have invested and will invest in your education?
- b. Does it seem like a good investment? Can you think of another investment that would give you as large of a return? Will the return on another investment last as long?
- c. What are some things that you could do that would make your educational investment even better? Can you reduce the costs, or increase the annual return by redirecting your studies or relocating after you graduate?

Answer: High-quality responses should include a discussion of the student's chosen career, estimated income, and estimated cost of education as well as thoughtful responses to questions (a), (b), and (c). Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.2; LO: 1.2; BT: S; Diff: H; TOT: 90 min; AACSB: RT, C, A, T

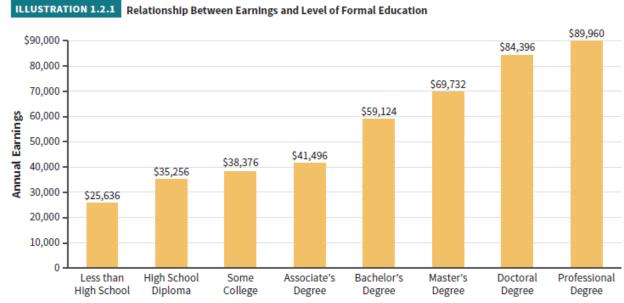
### 1.2 Practice Questions

- 1. Lifetime earnings and education are positively related. Select the ranking that represents the median lifetime earnings based on education achievement from lowest to highest.
  - a. High School Diploma, Associates Degree, Some College, Master's Degree.
  - b. Professional Degree, Bachelor's Degree, Associate's Degree, High School Diploma.

- c. High School Diploma, Bachelor's Degree, Doctoral Degree, Professional Degree.
- d. Bachelor's Degree, Professional Degree, Master's Degree, Doctoral Degree.

Answer: c; Section: 1.2; LO: 1.2; BT: Ap; Diff: M; TOT: 2 min; AACSB: n/a

Solution: Your earnings are an indicator of the value of your human capital in the labor market. Earnings are often closely associated with your level of formal education. Illustration 1.2.1 shows how annual earnings increase with formal education.



Source: U.S. Bureau of Labor Statistics.

- 2. All of the following influence your human capital, except
  - a. your health.
  - b. your income.
  - c. your educational level.
  - d. your skill(s).

Answer: b; Section: 1.2; LO: 1.2; BT: K; Diff: E; TOT: 2 min; AACSB: RT

- 3. As people age, their human capital can decline due to changes in the marketplace that demand different skills and abilities. One way to boost human capital is to
  - a. enroll in a continuing education program.
  - b. go back to school and learn a new skill.
  - c. begin working out in order to look younger.
  - d. both enroll in a continuing education program and go back to school and learn a new skill.

Answer: d; Section: 1.2; LO: 1.2; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

- 4. Which of the following is most likely to reduce your social capital among those who may be likely to hire you for a job?
  - a. Posting pictures of yourself with influential politicians in your community.
  - b. Sending notes to business colleagues congratulating them on their accomplishment.
  - c. "Liking" someone's photo posted on a social media site.
  - d. Posting pictures of yourself drinking at a bar.

Answer: d; Section: 1.2; LO: 1.2; BT: C; Diff: E; TOT: 2 min; AACSB: RT

- 5. Which of the following occupations is likely to have the highest median salary?
  - a. Kindergarten teacher.
  - b. Massage therapist.

- c. Construction worker.
- d. Personal financial advisor.

Answer: d; Section: 1.2; LO: 1.2; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

### 1.3 Discuss how financial risk tolerance relates to financial goal achievement.

### 1.3 Multiple-Choice Questions

1. a. on a scale that can change over time.

Answer: a; Section: 1.3; LO: 1.3; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

2. d. not be worried because her risk tolerance will increase as her knowledge and experience increase.

Answer: d; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

3. d. It is impossible to know what Terry's financial risk tolerance is given the information provided.

Answer: d; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

4. c. The person who is willing to take risk after adequate research.

Answer: c; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

5. c. generate the lowest returns.

Answer: c; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

6. a. The greater the return required, the greater the risk that must be taken.

Answer: a; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

7. d. They have a relatively low level of financial literacy, and they view playing the lottery as a form of entertainment.

Answer: d; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

8. c. risk perception.

Answer: c; Section: 1.3; LO: 1.3; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

9. a. risk preference.

Answer: a; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

10. b. a general change in perceptions about the chain's quality of food.

Answer: b; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

### 1.3 Adventures in Personal Finance

### **Short Answer**

**1.** Answer: Uncertainty in financial decision refers to financial risk. Other behaviors also have risk or uncertain outcomes. Examples of risky behavior include texting while driving, drinking alcohol excessively, driving without a seat belt, chronic overeating, and sedentary lifestyle. Many activities in our daily life are inherently risky.

Section: 1.3; LO: 1.3; BT: Ap or An; Diff: M; TOT: 20 min; AACSB: A

**2.** Answer: Risk perception is the cognitive evaluation of potential gains and losses. Risk preference is the amount of uncertainty individuals desire or seek. Risk tolerance is the willingness to engage in financial activities with uncertain outcomes.

Section: 1.3; LO: 1.3; BT: Ap; Diff: M; TOT: 15 min; AACSB: An

3. Answer: Students should clearly state the activity and its rating for questions (a), (b), and (c).

Section: 1.3; LO: 1.3; BT: Ap; Diff: M; TOT: 20 min; AACSB: RT

### **Explore**

1. Write a brief reaction paper to the following statement: If you take recreational risks, you are also more likely to take financial risks. Be sure to address the following questions: Do you agree with this statement? What evidence exists from your personal experience that supports your position? What does the research say about this relationship?

Answer: High-quality responses should include a discussion of whether the student agrees with the risk statement and provides evidence from his or her personal experience that supports his or her position, including research on this topic. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.3; LO: 1.3; BT: S; Diff: M; TOT: 30 min; AACSB: C, RT, A

2. Conduct an internet search using the phrase "Rutgers Risk Quiz." Take the free risk-tolerance questionnaire at this site, making sure to answer all questions honestly based on your current situation. When you finish the questionnaire, you'll receive a risk score. How accurate is the score in your opinion? Talk to others in class about the accuracy of their risk scores.

Answer: High-quality responses should include a discussion of the student's perception of how accurate the risk score is. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.3; LO: 1.3; BT: Ap; Diff: E; TOT: 20 min; AACSB: RT

3. Search the Internet to find the odds associated with events that are commonly reported in the news (some of these events may not be financial). Write a brief report showing each event and its corresponding odds of occurrence in a year. Which event was more likely? Is your perception of these events accurate? Did you think any of these events were more or less common than they really are? Be sure to report if the odds matched your initial expectations.

Answer: High-quality responses should clearly identify events and the odds or probabilities of those events occurring; additionally, students should also discuss their perceptions of those events occurring and whether they actually occur more or less frequently than what they thought. Please refer to the sample writing assignment rubric in the solutions manual. Section: 1.3; LO: 1.3; BT: S; Diff: M; TOT: 60 min; AACSB: RT, C, A

# 1.3 Expanded Learning Activity

Have you heard of Bernie Madoff or **Enron Corporation**? Bernie Madoff stole billions of dollars from investors. Enron was a company that faked its sales and earnings. The company eventually went bankrupt, and investors lost billions of dollars. People remember these things, because they are, in fact, quite unusual. However, people come to perceive these events as being representative of all aspects of the financial markets. How does this insight help explain why some people think the stock market is a big gamble? Do some research to see how many large U.S. corporations went bankrupt last year. Also look at how much money people lost to investment fraud compared with how much money is invested in the stock market. If you were giving advice to a novice, investor how would you counsel them about their perceptions of companies going out of business and investment advisors stealing his or her money?

Answer: High-quality responses should include a thorough discussion of why some people think the stock market is a big gamble. The discussion should also include the actual number of corporate bankruptcies and frauds in which people lost their money in relation to the number of publicly traded companies. High-quality responses should also include recommendations or advice or direction for a novice investor who thinks the stock market is a big gamble. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.3; LO: 1.3; BT: S; Diff: M; TOT: 30 min; AACSB: C, RT, A

# 1.3 Practice Questions

- 1. Financial risk tolerance refers to your
  - a. perception of the riskiness of a situation or investment.
  - b. preference when choosing between two or more investments.
  - c. willingness to engage in a risk in which an outcome is uncertain.
  - d. capacity to sustain an expected loss.

Answer: c; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

- 2. The fact that nearly everyone would like to be wealthier rather than poorer refers to his or her risk
  - a. perception.
  - b. preference.
  - c. tolerance.
  - d. capacity.

Answer: b; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

- 3. It is possible to increase your financial risk tolerance over time. What is the process of risk tolerance change?
  - a. Knowledge leads to confidence, which leads to experience, understanding, and an increase in risk tolerance.
  - b. Experience leads to understanding, which leads to confidence, knowledge, and an increase in risk tolerance.
  - c. Risk tolerance leads to confidence, which leads to understanding, experience, and increased knowledge.
  - d. Understanding leads to risk tolerance, which leads to experience, confidence, and increased knowledge.

- 4. Loraine is thinking about her future retirement goals and needs. She has 25 years until retirement. She needs to save quite a bit of money to reach her retirement goal. Unfortunately, Loraine's risk tolerance is low. Given these facts, what is the best recommendation for Loraine?
  - a. Postpone retirement to offset the fact that her tolerance for risk is so low.
  - b. Invest more aggressively knowing that she has time on her side to withstand any temporary setbacks with these riskier investments.
  - c. Obtain a second job to double her savings into low-risk investments.
  - d. Supplement her savings with the use of lottery tickets in the hopes of earning a large windfall.

Answer: b; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

- 5. Nicki is meeting with her financial planner. She is new to investing and does not have much experience in the markets. She recently took a risk-tolerance quiz and scored below average in terms of risk tolerance. Her financial planner is now recommending that she purchase shares in an aggressive mutual fund that invests in very risky small companies. The financial planner's argument is that Nicki needs to take risk to achieve decent returns. Do you agree with the financial planner?
  - a. Yes, because the only way to make money is to take big risks.
  - b. No, because Nicki's risk tolerance does not match the mutual fund's risk profile.
  - c. Yes, because Nicki's risk tolerance should only be used to indicate the minimum level of risk she should take.
- d. No, because the only way to make money is to take small incremental risks. Answer: b; Section: 1.3; LO: 1.3; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

### 1.4 Use your unique time perspective to create SMART financial goals.

# 1.4 Multiple-Choice Questions

1. a. Specific.

Answer: a; Section: 1.4; LO: 1.4; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

2. d. Long term.

Answer: d; Section: 1.4; LO: 1.4; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

- 3. b. If the value of the assets were to fall, there would not be enough time to recoup the loss. Answer: b; Section: 1.4; LO: 1.4; BT: C; Diff: E; TOT: 2 min; AACSB: A
  - 4. c. help you reach your long-term goals.

Answer: c; Section: 1.4; LO: 1.4; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

5. a. Past.

Answer: a; Section: 1.4; LO: 1.4; BT: Ap; Diff: M; TOT: 2 min; AACSB: RT Solution: Most people view the world primarily from one of three time perspectives or lenses:

• Past-oriented: based on memories, whether good or bad. Those who view past events negatively have the most trouble staying on their financial path. Sancho is past-oriented. Present-oriented: based on either (a) a hedonistic perspective (doing things for pleasure, experience, and excitement of the action) or (b) a fatalistic perspective (unable to visualize a

- meaningful future). Understandably, those with a fatalistic outlook sometimes have a hard time reaching their long-term financial goals.
- Future-oriented: based on a calculation of the consequences of actions in terms of a future payoff. Those with a future orientation tend to be very goal-oriented. As such, they might do a better job of managing their personal financial situation in the long run but may miss out on some opportunities along the way.

#### 6. c. Present-hedonistic.

Answer: c; Section: 1.4; LO: 1.4; BT: Ap; Diff: M; TOT: 2 min; AACSB: RT Solution: Most people view the world primarily from one of three time perspectives or lenses:

- Past-oriented: based on memories, whether good or bad. Those who view past events negatively have the most trouble staying on their financial path.
- Present-oriented: based on either (a) a hedonistic perspective (doing things for pleasure, experience, and excitement of the action) or (b) a fatalistic perspective (unable to visualize a meaningful future). Understandably, those with a fatalistic outlook sometimes have a hard time reaching their long-term financial goals. Arnold has a present-hedonistic orientation.
- Future-oriented: based on a calculation of the consequences of actions in terms of a future payoff. Those with a future orientation tend to be very goal-oriented. As such, they might do a better job of managing their personal financial situation in the long run but may miss out on some opportunities along the way.
- 7. a. Those who resist temptation today.

Answer: a; Section: 1.4; LO: 1.4; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

8. c. 70%.

Answer: c; Section: 1.4; LO: 1.4; BT: Ap; Diff: M; TOT: 2 min; AACSB: n/a Solution: The marshmallow experiment was first undertaken by Walter Mischel, a Columbia University faculty member, in the 1960s. Mischel was tempting young children with an almost irresistible treat. At the core of the temptation is the notion of time perspective. Mischel wanted to determine who was willing to forgo immediate rewards for a larger payoff in the future: It turns out that two-thirds of the children ate the marshmallow before the researcher returned. Subsequent research indicates that about 70% of Americans—both children and adults—fall prey to temptation. They tend to be impulsive and quick acting.

9. b. Receiving a bonus.

Answer: b; Section: 1.4; LO: 1.4; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

10. b. Most Americans naturally tend to hold a future time orientation. Answer: b; Section: 1.4; LO: 1.4; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

#### 1.4 Adventures in Personal Finance

#### **Short Answer**

1. Answer: High-quality responses should include two SMART goals that address all the areas of a SMART goal. Please refer to the sample writing assignment rubric in the solutions manual. Section: 1.4; LO: 1.4; BT: S; Diff: M; TOT: 15 min; AACSB: RT, C

**2.** Answer: a—3; b—5; c—1; d—4; e—2.

Solution:

a. Past-negative.	3. You let past experiences and emotions upset you and sometimes feel regretful.
b. Past-positive.	5. You love to daydream and think about the good things that have already happened to you.
c. Present-hedonistic.	1. You seek out pleasure, good times, and experiences when given the opportunity.
d. Present-fatalistic.	4. You would like to take control of your future but feel trapped and unable to change things today.
e. Future-oriented.	2. You strive to reach your goals, almost at any cost.

Section: 1.4; LO: 1.4; BT: C; Diff: E; TOT: 10 min; AACSB: n/a

3. Answer: High-quality responses should include a list of strategies for altering time perspectives. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.4; LO: 1.4; BT: S; Diff: M; TOT: 20 min; AACSB: RT

4. Answer: High-quality responses should address each of the points (a)–(d) posed in the question. Please refer to the sample writing assignment rubric in the solutions manual. Section: 1.4; LO: 1.4; BT: An; Diff: M; TOT: 20 min; AACSB: RT, C

### **Explore**

1. Not everyone believes that developing goals using the SMART approach is effective. Conduct an Internet search to find videos or websites that argue against SMART goal methods. Based on your findings, write one to two paragraphs discussing the advantages and disadvantages associated with using SMART to formalize goals.

Answer: High-quality responses should include a discussion of the advantages and disadvantages of SMART goals. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.4; LO: 1.4; BT: An; Diff: M; TOT: 40 min; AACSB: A, C

2. Make a list of your 10 highest-priority goals. Then search the Internet using "most popular goals." Click on two or three of the most popular sites and then list the top 10 goals shown on these sites. Of all the goals listed, how many are financial in nature? Now compare your list to the compiled list. What are the similarities and differences?

Answer: High-quality responses should include two lists: (1) students' top 10 goals and (2) top 10 most common goals from the Internet. Students should also discuss these goals to determine how many of the goals are financial. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.4; LO: 1.4; BT: An; Diff: M; TOT: 20 min; AACSB: RT, C, A

3. Our discussion has only touched the tip of the iceberg in terms of time perspective. Visit Dr. Philip Zimbardo's website and complete the full-time perspective inventory by typing in

"Zimbardo Time Perspective Inventory." Print your final score. Write a brief narrative regarding the accuracy of your score in predicting your time perspective orientation.

Answer: High-quality responses should include a discussion of the student's score on the inventory and the student's response to the score. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.4; LO: 1.4; BT: An; Diff: M; TOT: 45 min; AACSB: RT, C, A

# 1.4 Expanded Learning Activity

According to psychological researchers, culture is an important factor that determines someone's time perspective. For example, children raised in households that value sharing, giving, and strong work values often hold a future-oriented time perspective. On the other hand, children who are raised in households in which immediate gratification is the norm tend to use a present time perspective when making decisions. Other factors include age, gender, income, experience, and knowledge. All these elements point to the positive conclusion that time perspective can change to be more in tune with wealth accumulation, debt reduction, and overall increased financial well-being. Write a brief review of your own childhood, paying special attention to the way you made and were rewarded for choices. When writing your review, comment on whether you would make the same decisions today. If not, what has changed?

Answer: High-quality responses should include a discussion of the student's childhood, paying special attention to the way he or she made choices and how he or she was rewarded for those choices, and a discussion of how or whether he or she wants that to change. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.4; LO: 1.4; BT: Ap; Diff: M; TOT: 30 min; AACSB: RT, C, A

# 1.4 Practice Questions

- 1. The "A" in SMART stands for
  - a. actionable.
  - b. always.
  - c. available.
  - d. attainable.

Answer: d; Section: 1.4; LO: 1.4; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

- 2. Which of the following goals is the most clearly stated?
  - a. To retire in 20 years.
  - b. To purchase an \$18,000 car in 20 years.
  - c. To fund a \$3,500 vacation in San Diego in 9 months.
  - d. To purchase a home in 7 years with a sizeable down payment.

Answer: c; Section: 1.4; LO: 1.4; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

- 3. Kaylee has been dreaming of a grand vacation for several years. Last year, she started to save for this once-in-a-lifetime event. So far, she has saved \$2,000 toward a goal of \$25,000. Her plan is to travel in 6 years. What is Kaylee's goal time horizon?
  - a. Short term.
  - b. Short-intermediate term.
  - c. Long-intermediate term.
  - d. Long term.

Answer: c; Section: 1.4; LO: 1.4; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

- 4. Which of the following time orientations is most closely associated with a lack of goal orientation, a general feeling of hopelessness, and general pessimism?
  - a. Past-positive.
  - b. Past-negative.
  - c. Present-hedonistic.
  - d. Future goal.

Answer: b; Section: 1.4; LO: 1.4; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

- 5. A person's time orientation can shape life outcomes. Which of the following is most closely associated with lifetime wealth accumulation?
  - a. Present-hedonistic.
  - b. Past-positive.
  - c. Future goal.
  - d. Present-fatalistic.

Answer: c; Section: 1.4; LO: 1.4; BT: C; Diff: E; TOT: 2 min; AACSB: RT

# 1.5 Describe strategies to overcome mental biases and improve financial decision making and well-being.

# 1.5 Multiple-Choice Questions

1. c. she feels that the likelihood of getting the full \$550 is less than that of getting a guaranteed \$515.

Answer: c; Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 2 min; AACSB: n/a Solution: The status quo bias is your personal preference for keeping things just like they currently are. This bias is prevalent because most people are usually comfortable with their current situation, even when much better options are available. Melinda would not be changing her situation, regardless of which payment option she elects to take. Hyperbolic discounting is a form of procrastination, where a person places a greater value on the immediate option, while discounting a future greater benefit further away. However, if both benefits are not immediate, the greater benefit regardless of time will be of greater value. The choice of taking the money today over a greater sum in the future is a form of loss aversion: the feeling ". . . that the likelihood of getting the full \$550 is less than getting a guaranteed \$515."

2. b. Never buy stocks on a Monday.

Answer: b; Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 2 min; AACSB: n/a Solution: Heuristics are based on past experiences or learning that the mind applies to new situations. Most heuristics are automatic and rarely used with forethought. Although heuristics can help you make quick decisions, they sometimes lead to problematic choices and outcomes because of behavioral biases. "Never buy stocks on a Monday" is an example of confirmation bias, where past negative outcomes of purchasing stocks on a Monday lead to a belief that it's bad luck to do it.

3. c. status quo bias.

Answer: c; Section: 1.5; LO: 1.5; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

4. c. Status quo.

Answer: c; Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 2 min; AACSB: n/a Solution: The status quo bias is your personal preference for keeping things just like they currently are. This bias is prevalent because most people are usually comfortable with their current situation, even when much better options are available.

5. b. loss aversion.

Answer: b; Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 2 min; AACSB: n/a Solution: Loss aversion is a behavioral bias toward losing money. Behavioral economists have concluded that if you lose, your emotional pain—your feelings of loss and the regret associated with making a bad decision—will also be two times as great as the joy of winning. As a result, people generally focus much of their attention on avoiding losses because the joy of a gain is smothered by the pain of a loss.

6. a. optimism bias.

Answer: a; Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 2 min; AACSB: n/a Solution: Optimism bias is a behavioral bias toward having overconfidence and a lack of risk averseness. A history of taking risks without negative consequence builds this bias.

7. c. confirmatory bias.

Answer: c; Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 2 min; AACSB: n/a Solution: Confirmation bias is a behavioral bias believing that acts of skill are to attribute toward successful outcomes rather than coincidence and chance. Rationalizing acts of expertise to confirm the assessments of successful outcomes will lead to overconfidence in future decisions.

8. b. Precommitting to decisions.

Answer: b; Section: 1.5; LO: 1.5; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

9. b. automating good decisions.

Answer: b; Section: 1.5; LO: 1.5; BT: K; Diff: E; TOT: 2 min; AACSB: n/a

10. a. I only.

Answer: a; Section: 1.5; LO: 1.5; BT: C; Diff: E; TOT: 2 min; AACSB: n/a

### 1.5 Adventures in Personal Finance

#### **Short Answer**

1. Answer: a—3; b—1; c—4; d—5; e—2.

Section: 1.5; LO: 1.5; BT: C; Diff: E; TOT: 10 min; AACSB: n/a

2. Answer: High-quality responses should include a list of three tasks and action steps to prevent procrastination on those tasks. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.5; LO: 1.5; BT: Ap; Diff: E; TOT: 10 min; AACSB: RT

3. Answer: High-quality responses should include a discussion of past experiences when overconfidence or optimism bias led to unwise decisions. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 15 min; AACSB: RT

4. Answer: High-quality responses should include a discussion of how a clear picture of your future financial goals influences or would influence current choices and whether a long-term goal or a clear picture of the future would be most impactful in reaching future goals. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.5; LO: 1.5; BT: S; Diff: H; TOT: 30 min; AACSB: RT, C

### **Explore**

1. Search the **YouTube** website for "behavioral biases in decision-making" and then select a video to watch. After watching it, describe your reaction to it in one to two paragraphs. Be sure to note whether you were surprised by what you did, and did not, see. Also, comment on how well the video illustrates the tendency of people to be fooled by behavioral biases.

Answer: High-quality responses should describe the video that was watched, what the video was teaching, and the student's reaction to the video. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.5; LO: 1.5; BT: An; Diff: M; TOT: 30 min; AACSB: RT

2. Many people pay late fees simply because they forget to pay their bills. Go through your current recurring bills, such as those for utilities, phone, or loans. Check to see if any of these companies offer electronic billing. Now, check with your bank (or credit union) and see if it offers electronic bill payment services. Through this service, you may be able to have the company bill you, and then your bank will automatically pay the bill on-time each month. By automating your bill payment method, you could potentially avoid late fees and improve your finances. Besides, you are saving on postage. Write a short summary about your findings and if you will (or why you won't) begin to use these services.

Answer: High-quality responses should include a discussion of how automating bill payments will benefit the student. Please refer to the sample writing assignment rubric in the solutions manual.

Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 20 min; AACSB: RT, T, C

# 1.5 Expanded Learning Activity

Behavioral economic concepts apply to many areas of daily life, including marketing, diet, and exercise. Conduct an analysis of ways government and business use behavioral economic techniques to change your personal financial management behaviors. Write a brief summary of your findings. Based on your research, create a "to-do" list for saving. Be sure to share with your instructor and other students any techniques that you find unethical or manipulative?

Answer: High-quality responses should include a summary of findings, a "to-do" list for saving, and a discussion of any techniques that you find unethical or manipulative. Please refer to the sample writing assignment rubric in the solutions manual.

### 1.5 Practice Questions

- 1. Which of the following best describes a procrastinator?
  - a. They value the present more than the future.
  - b. They value the future more than the present.
  - c. They value neither the future nor the present.
  - d. They value the future and present equally.

Answer: a; Section: 1.5; LO: 1.5; BT: K; Diff: E; TOT: 2 min; AACSB: RT

- 2. When people make financial decisions, they rely on
  - a. cognitive evaluations.
  - b. feelings.
  - c. mental shortcuts.
  - d. All of these answer choices are correct.

Answer: d; Section: 1.5; LO: 1.5; BT: K; Diff: E; TOT: 2 min; AACSB: RT

- 3. People become overconfident when they
  - a. experience losses.
  - b. procrastinate.
  - c. seek out confirmation of their beliefs and opinions.
  - d. focus on the present.

Answer: c; Section: 1.5; LO: 1.5; BT: K; Diff: E; TOT: 2 min; AACSB: RT

- 4. Asking someone to start saving next week, rather than some time later, helps the person
  - a. precommit to his or her decision.
  - b. reduce his or her confirmation bias.
  - c. increase future loss aversion.
  - d. stay focused on the achievement of long-term goals.

Answer: a; Section: 1.5; LO: 1.5; BT: K; Diff: E; TOT: 2 min; AACSB: RT, C

- 5. Which behavioral economics bias can result in someone forgoing possible long-term growth of assets because he or she wants his or her investments to be safe?
  - a. Loss aversion.
  - b. Overconfidence.
  - c. Status quo.
  - d. Optimism.

Answer: a; Section: 1.5; LO: 1.5; BT: K; Diff: E; TOT: 2 min; AACSB: RT

# **Chapter 1 End-of-Chapter Summary Assessment**

### **Continuing Case: Tarek's Financial Journey**

Beginning with this chapter, you will have an opportunity to assist Tarek begin his financial journey. You will have a chance to catch up with Tarek at the end of each of the remaining chapters. Let's meet Tarek and learn a bit about his current financial situation.

Tarek, age 26, is single, although he is in a committed relationship. After graduating from college, he moved to the Midwest to begin his career. His interest in learning about personal finance topics and money management has increased over the past few months. Like many

people his age he went through school with little interest in these topics. Now that he is working and thinking about his future, he wants to make sure that he is making the best financial decisions. Let's help Tarek begin his financial journey by learning more about his interior financial attitudes and expectations.

When Tarek heard about the idea of time perspectives, he was curious about his own preferences. He found the following questions online. He knew there are no correct or incorrect responses.

# **Time Perspective Questionnaire**



- 1. I believe that getting together with my friends to party is one of life's important pleasures.
- 2. I believe that a person's day should be planned ahead each morning.
- 3. I often think of what I should have done differently in my life.
- 1. Let's say that Tarek answers the first question as disagree, the second question as strongly agree, and the third question as strongly disagree. Based on his answers what is his time perspective?
  - Answer: Tarek most likely has a future time perspective. The answer is based on the following guidelines: Question 1—If you "agree" or "strongly agree" with this statement, you probably have a present perspective. Question 2—If you answered "agree" or "strongly agree" to this one, it means that you are likely directed by a future goal perspective. Question 3—Answering "agree" or "strongly agree" to this item means that you probably see the

<sup>1</sup> These and similar questions can be found in: D'Alessio, M., Guarino, V. D. P., and Zimbardo, P. G. (2003), Testing Zimbardo's Stanford Time Perspective Inventory (STPI)—short form: An Italian study. *Time & Society, 12*(2/3), pp. 333-347. See also: Zimbardo P. and Boyd J., Putting Time in Perspective: A Valid, Reliable Individual-Difference Metric, *The Journal of Personality and Social Psychology, Vol. 77*, 1999, pp. 1271-1288.

world using a past perspective.

Time Perspective	Past	Positive	Loves thinking about all the fun things that have happened in the past.
		Negative	Fixated on all the bad things that have happened in the past.
	Present	Hedonistic	Living life day-to-day for pleasure.
		Fatalistic	Living for today with no meaningful future.
	Future	Goal Oriented	Willing to forgo pleasures today for happiness in the future.

ILLUSTRATION 1.4.3
Time Perspective Preferences

Source: Adapted from P. G., Zimbardo and J. N. Boyd, "Putting Time in Perspective: A Valid, Reliable Individual-Difference Metric," *Journal of Personality and Social Psychology* (77, 1999), pp. 1271–1288.

Section: 1.5; LO: 1.5; BT: An; Diff: M; TOT: 5 min; AACSB: A

2. What does Tarek's time perspective indicate about his potential money management ability? Answer: In general, those who hold a future perspective, particularly those who are goal-oriented, do a better job of managing their personal financial situation. This bodes well for Tarek as he attempts to reach his life and financial goals.

Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 5 min; AACSB: A

3. Tarek's girlfriend, Samantha, is thinking about going on to earn a master's degree in history from an Ivy League university. Samantha loves everything there is to know about ancient middle eastern philosophy. She found a scholar who is exploring this very topic from a historical perspective. If Samantha decides to go back to school, she anticipates paying two years of tuition equal to \$63,000 yearly. She plans to borrow most of this amount. This amount includes tuition, room, food, books, and other fees. She would need to quit her current job, which will lead to a loss of income of \$33,000 per year. She believes that having a master's degree will allow her to teach high school history, which should increase her annual income to \$35,000 per year. Based on this information, what is Samantha's payback period?

Answer: 96 years.

Solution: Her two primary expenses include a lost income of \$66,000 and educational expenses of \$126,000. Combined, the cost of the master's degree will be \$192,000. However, she is expecting to earn only \$2,000 more per year. As such, her payback period is 96 years (\$192,000/\$2,000). Section: 1.5; LO: 1.5; BT: An; Diff: M; TOT: 20 min; AACSB: A

4. Based on your analysis from the previous question, does it make economic sense for Samantha to go back to school at this time? What might be an alternative?

Answer: It will take her approximately 96 years to break even on the costs associated with obtaining this particular degree. So, no, it does not make sense to invest in this master's degree at this time. An alternative is to obtain a master's degree from a less expensive college or university or work toward her degree on a part-time basis. Another alternative is to change her degree to something that offers a quicker payback period.

Section: 1.5; LO: 1.5; BT: S; Diff: M; TOT: 10 min; AACSB: A

### Calculating the Cost of Life's Financial Journey

Researchers at some of the nation's leading universities have been studying financial literacy for years. Results from their work provide interesting insights into the financial capabilities of the average American. Their findings are a bit sad. The average American is, well, basically a "C" student when it comes to financial issues—and we are talking about adults! What follows are a number of questions that these researchers ask survey participants to think about. See if you can beat the national averages for correct and incorrect responses!

**a.** If the chance of getting a disease is 10 percent, how many people out of 1,000 would be expected to get the disease?

Answer: 100.

Solution: 10% of 1,000 people is 100. 1,000 people  $\times 0.10 = 100$  people.

Section: 1.5; LO: 1.5; BT: An; Diff: M; TOT: 5 min; AACSB: RT

**b.** If 5 people all have the winning number in the lottery and the prize is \$2 million, how much will each of them get?

Answer: \$400,000.

Solution:  $\frac{\$2,000,000 \ prize}{5 \ people} = \$400,000 \ per \ person$ 

Section: 1.5; LO: 1.5; BT: An; Diff: M; TOT: 5 min; AACSB: RT

**c.** Let's say you have \$200 in a savings account. The account earns 10 percent interest per year. How much would you have in the account at the end of two years?

Answer: \$242.

Solution: Calculate the interest earned each year on the beginning balance, and add to your balance to calculate the ending balance. This calculation will compute the compound interest you earn every year.

First year: \$200 balance  $\times$  0.10 interest rate = \$20 interest earned. Ending balance = \$220. Second year: \$220 balance  $\times$  0.10 interest rate = \$22 interest earned. Ending balance = \$242.

Section: 1.5; LO: 1.5; BT: An; Diff: M; TOT: 5 min; AACSB: RT

**d.** Suppose you had \$100 in a savings account and the interest rate was 2 percent per year. After 5 years, how much do you think you would have in the account if you left the money to grow: more than \$102, exactly \$102, or less than \$102?

Answer: More than \$102.

Solution: Calculate the interest earned each year on the beginning balance, and add to your balance to calculate the ending balance. This calculation will compute the compound interest you earn every year. After 5 years, the balance will be greater than \$102, because it's \$104.04 after 2 years.

First year:  $$100 \text{ balance} \times 0.02 \text{ interest rate} = $2 \text{ interest earned}$ . Ending balance = \$102. Second year:  $$102 \text{ balance} \times 0.02 \text{ interest rate} = $2.04 \text{ interest earned}$ . Ending balance = \$104.04.

Section: 1.5; LO: 1.5; BT: An; Diff: M; TOT: 5 min; AACSB: RT

**e.** Imagine that the interest rate on your savings account is 1 percent per year and inflation is 2 percent per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?

Answer: Less than today.

Solution: Inflation reduces purchasing power, whereas earning interest increases purchasing power. Since the inflation rate of 2% is greater than the 1% interest rate you can earn, you will lose purchasing power in this scenario by 1% per year.

Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 5 min; AACSB: RT

**f.** Do you think that the following statement is true or false? "Buying a single company stock usually provides a safer return than a stock mutual fund."

Answer: False.

Solution: By owning one stock, you will risk your entire fortune on the stock. By diversifying your fortune by holding more than one stock, such as in a mutual fund, you are diversifying the business risk of any individual company that you own.

Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 5 min; AACSB: RT

### Planning for the Future

Edmond, age 33, is thinking about his financial future. After reading the chapter material, he has decided to focus his efforts on reaching the following three financial goals:

- ✓ Retire at age 55,
- ✓ Purchase a new pickup truck in 2 years to replace his late model car, and
- ✓ Go back to school in 5 years and obtain an MBA.

Based on this information, please do the following:

**a.** Categorize each goal based on the goal time horizon guidelines presented in the chapter. Answer: Retirement is a long-term goal, purchasing the pickup truck is a short-term goal, and going back to college is a short-intermediate-term goal.

Section: 1.5; LO: 1.5; BT: C; Diff: E; TOT: 5 min; AACSB: A

**b.** Rank the goals in terms of funding importance.

Answer: (1) Purchasing a new vehicle is important because having reliable transportation is essential to generating income and reducing maintenance expenses; (2) investing in human capital is also important as a way to increase earnings and assets; and (3) while retirement is very important, retiring this young is aspirational. Implementation of the other two goals will help Edmond achieve this retirement goal.

Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 5 min; AACSB: A

**c.** Choose one of Edmond's three goals. Using the following table, help Edmond clearly describe the goal using the SMART procedure; be as detailed as possible when providing guidance on each element.

Specific	Measurable	Attainable	Realistic	Timely

Section: 1.5; LO: 1.5; BT: Ap; Diff: M; TOT: 10 min; AACSB: A