Monitor your accounts and pay your bills on time. Use the online resources that most banks provide free of charge and check your account balance often. One of the best ways to get good interest rates on loans is to have a healthy credit score. Although we don't go into detail in the course about the components that make up a personal credit score, paying your bills on time, every time, will give you a good start to a good score.

Ask questions. Finally, don't assume you can't ask for help with financial matters. Ask questions and shop around to look for the best possibilities for you. Often, there isn't just one right answer that fits everyone's needs. There are plenty of resources available to the public, even online resources. Use them!

Skill Check Answers

1. $875.11

5.4 EXERCISES

PRACTICE

Consider a credit card with a balance of $7000. You wish to pay off the credit card in each scenario. Round your answer to the nearest cent, if necessary.

a. Calculate the amount of a monthly payment within the time frame given.

b. Calculate the total amount paid over the time period.

1. APR of 17.99% paid off within 1 year

2. APR of 12.5% paid off within 2 years

3. APR of 24% paid off within 3 years

Consider a credit card with a balance of $5560. You wish to pay off the credit card in each scenario. Calculate the following. Round your answer to the nearest cent, if necessary.

a. Calculate the amount of a monthly payment within the time frame given.

b. Calculate the total amount paid over the time period.

4. APR of 14.99% paid off within 1 year

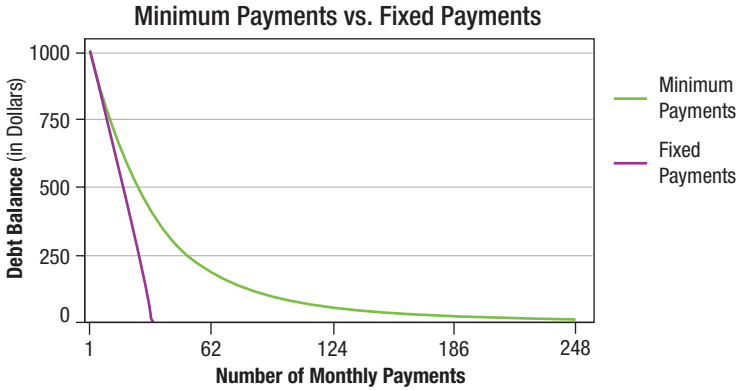
5. APR of 11.99% paid off within 2 years

6. APR of 5.9% paid off within 3 years

APPLICATIONS

Round your answer to the nearest cent, if necessary.

7. Given the chart below, solve the following problems.



a. Estimate the total amount paid when a debt balance was paid using a fixed monthly payment of $40.

b. Estimate the total amount paid when a debt balance was paid using the minimum monthly payment of $18.

8. Rachel is purchasing a new camera that costs $3800 for her photography business. Rachel uses a credit card that has an APR of 16.99%.

a. How long will it take her to pay off the camera if she makes monthly payments of $75?

b. How much will she pay in the long run for the camera if she makes monthly payments of $75?

c. How long will it take her to pay off the camera if she makes monthly payments of $150?

d. How much will she pay in the long run for the camera if she makes monthly payments of $150?

9. Tommy gets to choose from one of the new car incentives when he purchases his car next week. He can either choose 0.9% APR financing for 48 months or $1000 cash back with a 4.75% APR over 48 months. Compare the two incentives that Tommy has to choose from if the new car he wishes to buy is $32,457 and he has saved a down payment of $3500.

10. Mike bought a new car and financed $25,000 to make the purchase. He financed the car for 60 months with an APR of 6.5%. Determine each of the following.

a. Mike's monthly payment

b. Total cost of Mike's car

c. Total interest Mike pays over the life of the loan

11. Omar wants to purchase three vans for his delivery business. Each van costs $38,000. He wishes to finance the purchase for 48 months and has acquired an APR of 4.5%. Determine each of the following.

a. Omar's monthly payment

b. Total cost of Omar's vans

c. Total interest paid by Omar over the life of the loan

12. Jamal bought a new car for $32,000. He paid a 10% down payment and financed the remaining balance for 36 months with an APR of 4.5%. Determine each of the following.

a. Jamal's monthly payment

b. Total cost of Jamal's car

c. Total interest Jamal pays over the life of the loan

13. Susan wants to buy a new computer from Banana Computers. The company sells a laptop model for $2650. Susan decides to finance the computer for 24 months at an APR of 12.5%. Determine each of the following.
- **a.** Susan's monthly payment
- **b.** Total cost of the computer
- **c.** Total interest paid over the 24 months

14. Amanda and Ferobee are buying a house on a 30-year mortgage. They can only pay $800 per month for a mortgage. If they have an APR of 3.75%, what is the maximum price of a mortgage that they can take out?

15. Brad decides to purchase a $250,000 house. He wants to finance the entire balance. He has received an APR of 4.5% for a 30-year mortgage.
- **a.** What is Brad's monthly payment?
- **b.** Over the course of the loan, how much interest will Brad pay?
- **c.** What is Brad's total cost if he takes all 30 years to pay off the house?
- **d.** If he changed the term to 15 years instead of 30 years, what would his monthly payment be?
- **e.** With a 15-year mortgage, how much interest will Brad pay?
- **f.** With a 15-year mortgage, what is the total cost of the house?

16. The city of Nettleton recently completed a new school building. The entire cost of the project was $19,000,000. The city has put the project on a 20-year loan with an APR of 2.4%. There are 15,000 families that will be responsible for paying the loan.
- **a.** Determine the amount of the monthly payment for the loan.
- **b.** Determine the amount that each family should be required to pay each year to cover the cost of the school.
- **c.** Determine the total cost of the school.

17. You want to buy a car and finance $20,000 to do so. You can afford a payment of up to $450 per month. The bank offers three choices for the loan: a four-year loan with an APR of 7%, a five-year loan with an APR of 7.5%, and a six-year loan with an APR of 8%. Which option best meets your needs, assuming you want to pay the least amount of interest?

18. A credit card has a balance of $5000 at an APR of 9.99%. You plan to pay $500 each month in an effort to clear the debt quickly. How long will it take you to pay off the balance?

19. A credit card has a balance of $11,500 at an APR of 14.99%. You plan to pay $650 each month in an effort to clear the debt quickly. How long will it take you to pay off the balance?

20. Suppose you have a student loan of $80,000 with an APR of 4.5% for 25 years.
- **a.** What is your monthly payment?
- **b.** If you decide you want to pay off the loan in 15 years instead of 25, what is your monthly payment?
- **c.** What is your savings for paying the loan off in 15 years instead of 25?

21. Suppose you have graduated from college and want to purchase a house. Your take-home pay is $4560 per month and you wish to stay within the recommended guidelines for mortgage amounts by only spending $\frac{1}{4}$ of your take-home pay on a house payment. You have $18,500 saved for a down payment. With your good credit and the down payment you can get an APR from your bank of 4.35%, compounded monthly.
- **a.** What is the total cost of a house you could afford with a 15-year mortgage?
- **b.** What is the most that you could afford with a traditional 30-year mortgage instead of a 15-year?

WRITING & THINKING

22. What if you won the Powerball Lottery with a jackpot of $150 million? Calculate the amount of money you would receive over a 25-year period with each of the following two options. Which option gives you the most money over the 25 years?

Option 1: Taking all the money at once with a 40% penalty, and pay the income tax of 38% on the lump sum, and investing the remaining amount into an account earning 6% interest for 25 years.

Option 2: Acquire the money as part of an annuity to be paid out in 25 equal payments over a 25-year period, paying the income tax of 38% on the income from the winnings each year.