

## 6.2 Exercises



**Motorcycles** The tables show loan rates and terms for new and used motorcycle purchases. In Exercises 1–5, use the tables. (See Examples 1 and 2.)

NEW MOTORCYCLE	
Loan	APR
0 to 24 months	4.24
25 to 36 months	4.49
37 to 48 months	4.74
49 to 60 months	4.99
61 to 72 months	5.49
73 to 84 months	6.74

USED MOTORCYCLE	
Loan	APR
0 to 24 months	5.24
25 to 36 months	5.49
37 to 48 months	5.74
49 to 60 months	5.99
61 to 66 months	6.49

1. You buy a brand-new, custom-built chopper for \$35,000.
  - a. What is the monthly payment on a 60-month loan?
  - b. Create an amortization table showing how the balance of the loan decreases.



2. You buy a used motorcycle for \$8000.
  - a. What is the monthly payment on a 36-month loan?
  - b. Create an amortization table showing how the balance of the loan decreases.

3. You buy a used motorcycle for \$5000 and choose a 24-month loan. In 12 months, is the remaining balance less than one-half of the original loan amount? If not, when does this occur?

4. You buy a new motorcycle for \$18,000 and choose an 84-month loan. What is the cost of credit?

5. You buy a new dirt bike for \$13,000.

- a. Find the monthly payments on loans with terms of 2 years, 3 years, 4 years, and 5 years.
- b. Find the cost of credit for each loan. How does the cost of credit change as the term increases?

6. **Double Payments** You are considering a 5-year loan for a motorcycle. Will making double monthly payments decrease the cost of credit by 50%? Given that you can easily make double payments, should you choose a different term? Explain.

