Course 3 Unit 6 Practice

LESSON 36-1

- **1.** What is the simple interest on a loan of \$5500 at a rate of 2.5% for 6 months?
 - **A.** \$34.38
 - **B.** \$68.75
 - **C.** \$82.50
 - **D.** \$825.00
- **2. Make sense of problems.** You want to purchase a new laptop for \$1200 on credit. The interest rate is 3.2%, and you will need to pay off the loan in 6 months.
 - **a.** How much interest will you pay for 6 months if you are paying simple interest?

b. What will be your monthly payment to repay the loan plus interest?

c. If you changed the term of the loan to 18 months, what is the effect on the interest cost and on your monthly payments?

- **3. Reason quantitatively.** Abraham wants to buy a new television that costs \$1100. He can take out a loan for 6 months at 2.2% or a loan out for 3 months for 3.4%. Which is the best deal for Abraham if he only has \$200 per month for a payment? Explain your reasoning.
- **4.** You borrow \$3000 for three years at an interest rate of 3.25%. Your monthly payments are \$92. What is the total cost of this loan?
 - **A.** \$276
 - **B.** \$2208
 - **C.** \$3092
 - **D.** \$3312
- **5.** Your credit card statement has a balance of \$325.75.
 - **a.** What would the minimum payment be at 21% interest?

b. How much would you pay if you pay the full balance by the due date?

LESSON 36-2

6. a. Calculate the simple interest on \$2000 invested at 3.5%.

b. Calculate the compound interest on \$2000 invested at 3.5% when the interest is compounded each quarter.

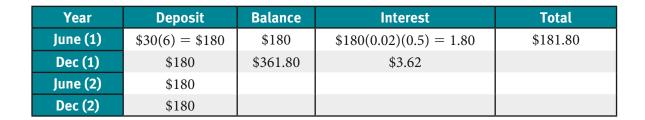
7. Attend to precision. You have decided to save \$30 every month, starting at the beginning of the year. The account carries a 4% interest rate, compounded twice a year. Complete the table to find savings and interest for two years. (Remember

that interest is 4% per year, not 4% per 6 months.)

- **8. Use appropriate tools.** Use an online interest calculator. http://www.thecalculatorsite.com/
 - **a.** If you save \$30 per month for 10 years at 4.5% compounded quarterly, how much will you have at the end of 10 years?

b. If you change your monthly savings to \$60 per month, how much would you have at the end of 10 years?

c. Change the number of years to 15 at \$60 per month, and recalculate the savings.



- **9.** If you save \$50 per month, but keep the cash in a box at your house, how much will you have at the end of three years?
 - **A.** \$600
 - **B.** \$1200
 - **C.** \$1800
 - **D.** \$2100

- 10. Use an online interest calculator, like the one at http://www.thecalculatorsite.com.

 Joan is saving \$100 per month in a savings account that pays 3% compounded quarterly. Horace is saving \$100 per month in a savings account that pays 3% compounded monthly. At the end of 10 years how much more money will Horace have accumulated?
 - **A.** \$5.00
 - **B.** \$5.52
 - **C.** \$6.12
 - **D.** \$10.52