

**6.7 Practice A**

An account earns simple interest. (a) Find the interest earned. (b) Find the balance of the account.

1. \$200 at 3% for 5 years
2. \$750 at 8% for 2 years
3. \$1600 at 5% for 1 year
4. \$500 at 12% for 6 months

Find the annual interest rate.

5.  $I = \$18$ ,  $P = \$150$ ,  $t = 6$  years
6.  $I = \$164.50$ ,  $P = \$940$ ,  $t = 2.5$  years

Find the amount of time.

7.  $I = \$72$ ,  $P = \$600$ ,  $r = 4\%$
8.  $I = \$174$ ,  $P = \$1450$ ,  $r = 8\%$
9. You deposit \$350 in a savings account. The account earns 2.5% simple interest per year. What is the balance after 2 years?

Find the amount paid for the loan.

10. \$1000 at 8% for 5 years
11. \$3500 at 10% for 2 years
12. You deposit \$2000 in a savings account earning 5% simple interest. How long will it take for the balance of the account to be \$3800?
13. Your parents charge a family ski trip of \$3000 on a credit card.
  - a. The simple interest rate is 20%. The charges are paid after 6 months. What is the amount of interest paid?
  - b. What is the total amount paid for the ski trip?
14. Your parents could have taken out a loan for the ski trip in Exercise 13.
  - a. The simple interest rate is 6% and the time for the loan is 2 years. What would have been the total amount paid for the \$3000 ski trip?
  - b. What would be the monthly payment, if there were equal monthly payments?
  - c. Which loan option costs less, the credit card or the loan?
15. You deposit \$1200 in an account earning 8% simple interest.
  - a. What is the account balance after 1 year?
  - b. At the end of the first year, you deposit the balance of the account in a CD (certificate of deposit) earning 8% simple interest. What is the account balance after another year?