SECTION 5-4 Simple Interest

When you deposit money in a savings account, you are permitting the bank to use the money. The amount you earn for permitting the bank to use your money is called interest. The principal is the amount of money earning interest. The annual interest rate is the percent of the principal that you earn as interest based on one year. Simple interest is the interest paid on the original principal.

**Interest = Principal × Rate × Time**

1. Alice Tsongas deposited $600 in a new savings account at Bradinton Savings and Loan Association. No other deposits or withdrawals were made. After 3 months the interest was computed at an annual interest rate of 3 1/2 percent. How much simple interest did she earn?

2. Henry Bonnacio deposited $1,000 in a new savings account at First National Bank. He made no other deposits or withdrawals. After 6 months the interest was computed at an annual rate of 6 1/2 percent. How much simple interest did he earn?

3. On June 1, Elena Moore deposited $610 in a savings account at Metro Savings and Loan Association. At the end of November her interest was computed at an annual interest rate of 4.5 percent. How much simple interest did she earn?

4. On March 31, you opened a savings account at Main Street Savings Bank with a deposit of $817.25. At the end of October the interest was computed at an annual rate of 5 3/4 percent and added to the balance in your account.
   a. How much simple interest did you earn?
   b. What was your new balance?

5. On February 1, the balance in your account is $516.81. On July 1, you deposit $310.90. Your bank pays 6 1/4 percent interest.
   a. How much interest have you earned on July 1?
   b. What is your balance, including your deposit, on July 1?
   c. How much interest have you earned on November 1?
   d. What is your balance on November 1?

Some banks calculate the interest on a daily basis. The daily interest is added to the account at the end of the month.

6. On May 1, Cleveland Livingston opened a savings account that paid 3.5 percent exact interest at Fulton Savings Bank with a deposit of $5,000. Ten days later he deposited $2,000. Fourteen days later he deposited $8,000. No other deposits or withdrawals were made. Six days later the bank calculated the daily interest.
   a. How much simple interest did his money earn?
   b. How much was in the account at the end of the 30 days?