## 3-6 Additional Practice

Leveled Practice Use the information to fill in the boxes and solve.

1. Liu deposited $\$ 3,500$ into a savings account.

The simple interest rate is $4 \%$.
a. How much interest will the account earn in 2 years?
Interest $=$ interest rate $\cdot$ principal • time


The account will earn \$ in 2 years.
b. How much interest will the account earn in 10 years?
Interest $=$ interest rate $\cdot$ principal $\cdot$ time


The account will earn \$ in 10 years.
2. Elsie's aunt borrows $\$ 400$ with an interest rate of $1.5 \%$. How much interest will she pay after 4 years?
3. Reasoning Suppose Houston deposits $\$ 600$ into a savings account with a simple interest rate of $2.5 \%$. He wants to keep his deposit in the bank long enough to earn at least $\$ 120$ in interest. For how many years should Houston keep his deposit in the bank, assuming he does not withdraw or add to the account balance? Explain. © MP. 2
4. Critique Reasoning Gil borrows $\$ 8,000$ for college expenses. He will pay a total of $\$ 10,280$ after 6 years. Gil says the interest rate is at least $5 \%$. Is he correct? Explain. © © MP. 3
5. If the principal, interest rate, or time in a simple interest problem is doubled, and the other two quantities remain constant, how does the simple interest amount change? Explain.
6. Make Sense and Persevere Give an example of two principal amounts and two periods of time for which the simple interest earned at $2.42 \%$ would be equal. Explain your answer. © © mp. 1
7. Higher Order Thinking Theodore earned $\$ 92.40$ in interest after 4 years on a principal of $\$ 550$. Bella earned $\$ 216.00$ in interest after 4 years on a principal of $\$ 1,500$. Which bank would you rather use, Theodore's or Bella's? Explain.

## Assessment Practice

8. Which of these would earn the same amount of interest as a $\$ 600$ principal with $2.5 \%$ interest for 6 years? Select all that apply.
$\$ 200$ at 5\% for 8 years
$\$ 80$ at 75\% for 18 months
$\$ 250$ at $10 \%$ for 2 years
$\$ 300$ at 2\% for 2 years
$\$ 225$ at 10\% for 4 years
9. Suppose Aaron earned $\$ 15.75$ in interest for Account A and \$28.00 in interest for Account $B$ after 21 months. If the simple interest rate is $3.0 \%$ for Account $A$ and 4.0\% for Account B, which account has the greater principal? Explain.
