Lesson 7-8

Example 1 Find Interest Earned
SAVINGS Samantha has $1,250 in a savings account that pays 4% simple interest. How much interest will she earn in 3 years?

$I = prt$	Formula for simple interest
$I = 1{,}250 \cdot 0.04 \cdot 3$	Replace p with 1,250, r with 0.04, and t with 3.
$I = 150$	Simplify.

Samantha will earn $150 in interest in 3 years.

Example 2 Find Interest Earned
SAVINGS Samantha has $1,250 in a savings account that pays 4% simple interest. How much interest will she earn in 9 months?

9 months $= \frac{3}{4}$ or 0.75 year	Write the time as years.
$I = prt$	Formula for simple interest
$I = 1{,}250 \cdot 0.04 \cdot 0.75$	Replace p with 1,250, r with 0.04, and t with 0.75.
$I = 37.50$	Simplify.

Samantha will earn $37.50 in interest in 9 months.

Example 3 Find Interest Paid on a Loan
LOANS Randy borrows $15,000 from the bank for a used car. The interest rate is 7% per year. How much simple interest will he pay if he takes 3 years to repay the loan?

$I = prt$	Formula for simple interest
$I = 15{,}000 \cdot 0.07 \cdot 3$	Replace p with $15,000, r with 0.07, and t with 3.
$I = 3{,}150$	Simplify.

Randy will pay $3,150 in interest in 3 years.

Example 4 Find Total Paid on a Credit Card

CREDIT CARDS Deshawn charged a $900 refrigerator on his credit card with an interest rate of 19%. If he has no other charges on the card and does not pay off the balance at the end of the month, how much money will he owe after one month?

$I = prt$	Formula for simple interest
$I = 900 \cdot 0.19 \cdot \frac{1}{12}$	Replace p with 900, r with 0.19, and t with $\frac{1}{12}$.
$I = 14.25$	Simplify.

The interest owed after one month is $14.25. So, the total amount owed would be $900 + $14.25 or $914.25.