Lesson 6-5

Example 1

Find the simple interest on $4800 borrowed for 3 yr at a rate of 6%/yr.

Solution

Use the formula $I = prt$.

$I = \$4800 \cdot 6\% \cdot 3$ $p = \$4800$, $r = 6\%$, and $t = 3$
$I = 4800 \cdot 0.06 \cdot 3$ Convert percentage to decimal.
$I = 864$

The interest is $864.

Example 2

Savings of $7250 are invested for 2 yr. This investment returns $580 in simple interest. Find the rate of interest on the money invested.

Solution

$I = prt$ Use the formula $I = prt$.
$580 = 7250 \cdot r \cdot 2$
$580 = 14{,}500r$
$\frac{580}{14{,}500} = \frac{14{,}500r}{14{,}500}$
$0.04 = r$

The money was invested at a rate of 4%.

Example 3

Kevin borrowed $9700 at an annual interest rate of 7.5%. The term of the loan was 30 mo. Find the simple interest and total amount due on the loan.

Solution

Find the simple interest.

$I = prt$
$I = 9700 \cdot 0.075 \cdot 2.5$ Change 7.5% to 0.075 and 30 mo to 2.5 yr.
I - 1818.75

Find the amount due.
$9700 + $1818.75 = $11,518.75

Kevin paid $1818.75 in simplest interest. The total due is $11,518.75.