

**LESSON**  
**3-4**

# Applications of Percent

## Success for English Learners

### Problem 1

Find the tax on the sale.

HH Mart Welcome!	
DVD Player	\$148.50
DVD	\$15.99
CD	\$15.99
<u>Subtotal</u>	<u>\$180.48</u>
Tax (7.75%)	\$13.99

Add the cost of total purchases to get a subtotal.

Multiply the subtotal by the tax rate.

$$t = 7.75\% \times \$180.48$$

$$t = 0.0775 \times 180.78$$

$$t = \$13.99$$

So, the sales tax is \$13.99 on purchases.

### Problem 2

Use this diagram to help you set up an equation for simple interest.

$$\text{Simple interest} = P \times r \times t$$

Principal

Rate

Time

Amount of money borrowed or invested

Interest rate written as a percent

Number of years money is borrowed or invested

Interest = \$14,500 × 7% × 5 years

$$I = 14,500 \times 0.07 \times 5$$

$$I = 5,075$$

Write 7% as  $\frac{7}{100}$  and change to a decimal, 0.07.

The simple interest on \$14,500 invested or loaned for 5 years at 7% is \$5,075.

1. Jon invested \$6,200 for 6 years at 3%. Calculate the simple interest.