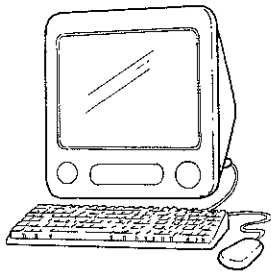


# Lesson 11: Installment Buying

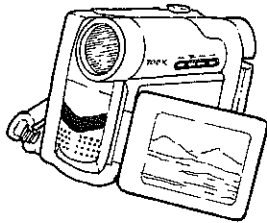
## Pre-Lesson Vocabulary Practice

On the right is a list of terms from this lesson. Read the terms and their definitions. Then work with a partner to use each term in an original sentence.

Use the pictures below to help you understand the meanings of the various store items. Then find and read the words and their sentences in this lesson.



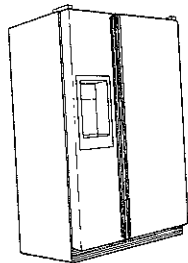
personal computer



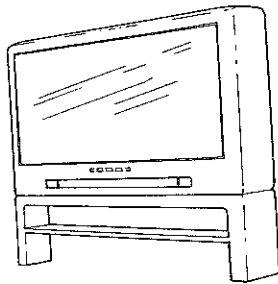
digital camcorder



12-speed mountain bike



side-by-side refrigerator



high-definition television



used pickup truck

**installment buying** – paying for something over a period of time

**manufactured products** – items that are produced or made in a factory

**over a fairly long** – during a long period of time

**household appliances** – items used in the home that are operated by electricity

**dealers** – persons who sell items

**expensive items** – store merchandise that costs a lot of money

**rather than** – instead of or versus

**the full purchase price** – the total amount or cost

**all at once** – completely

**buyer** – the person who buys or purchases something

**as soon as** – at the time

**advanced to** – loaned to

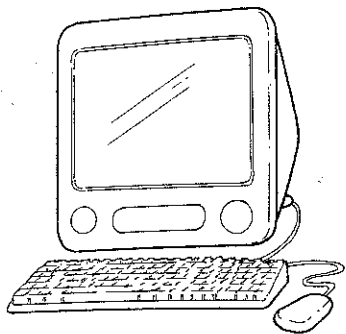
**listed at/for** – stated, as in an advertisement

## Lesson 11

# Installment Buying

Economists use the term **durables** or **durable goods** to describe manufactured products that can be used over a fairly long period of time. Cars, trucks, and household appliances are examples of durable goods.

Stores and dealers that sell durable goods usually offer their customers the option of paying for expensive items by using an **installment plan** rather than paying the full purchase price all at once. An installment plan is an agreement between a dealer and a consumer. The consumer usually makes a **down payment** and then regular monthly payments. Each monthly payment includes part of the **balance due** as well as **interest** that the dealer collects for allowing the buyer to pay over a period of time. Although the buyer can use the item as soon as he or she agrees to the terms of the installment plan, the dealer actually owns the item until the last payment is made.



**Example 1** Alicia wants to buy a new computer listed for \$709.97. She decides to buy the computer on an installment plan that requires a down payment of \$75 and 12 monthly payments of \$59 each. What total price will she pay for the computer?

**Solution** Find the total cost of the down payment plus the 12 monthly payments.

$$\$75 + (12 \times \$59) = \$75 + \$708 = \$783$$

It is a good idea to calculate the interest rate on the monthly payments of an installment purchase. The dealer in the first example is lending Alicia  $12 \times \$59 = \$708$  toward the purchase of her computer.

**Example 2** What is the interest rate on the installment plan described in Example 1?

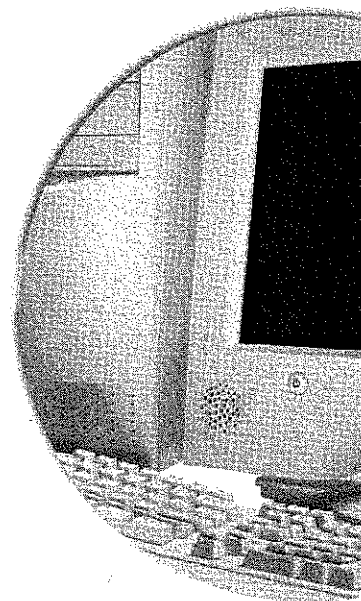
**Solution** The interest is the difference between the total cost and the list price:

$$\$783 - \$709.97 = \$73.03$$

Use the formula  $r = \frac{i}{pt}$  to find the rate of interest.

The principal is the \$708 that is advanced to Alicia, and the time is 1 year.

$$r = \frac{i}{pt} = \frac{\$73.03}{\$708 \times 1} = 0.1031\dots \text{ or } 10.3\%$$



**To solve the problems in the next exercise, review:**

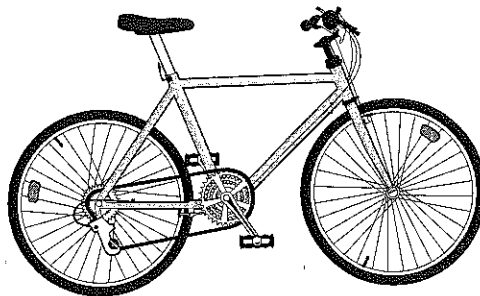
- finding what percent one number is of another, page 238
- interest, page 239

# Exercise 11

## Part A

Use a calculator to solve the following problems. Calculate each percent rate to the nearest tenth of one percent.

- 1 Max bought a color TV listed at \$399. He is paying on an installment plan that requires a down payment of \$80 and twelve monthly payments of \$30 each. What total price will Max pay for the television?
- 2 Find the interest rate on the monthly payments in the last problem.
- 3 A digital camcorder has a list price of \$499.99. Maki purchased the camcorder on an installment plan with a down payment of \$100. She agreed to pay an additional \$468 in six equal monthly installments. How much did she have to pay each month?
- 4 What was the interest rate on the installment payments in the last problem?
- 5 Pedro bought a 12-speed mountain bike that cost \$598. He paid \$75 down and made nine monthly payments of \$65 each. Find the total price he paid for the bike.



- 6 What interest rate did Pedro, in the last problem, pay on the installments?
- 7 The Madisons bought a washer and dryer listed at \$679. They made a down payment of \$100 and 18 monthly payments of \$36 each. What total price did they pay for the washer and dryer?
- 8 Find the interest rate on the Madisons' installment plan in the last problem.