

## 6-6 Day 1 Car Purchases and Leases

### Math Skill Builder

1. **Add** money amounts.

a)  $\$180 + \$570 + \$43$

$\$793$

b)  $\$24,765 + \$1,250$

$\$26,015$

2. **Subtract** money amounts.

a)  $\$18,367 - \$17,907$

$\$460$

b)  $\$38,431 - \$8,400$

$\$30,031$

3. **Multiply** money amounts by whole numbers and percents.

a)  $48 \times \$648$

$\$31,104$

b)  $21\% \times \$19,250$

$.21 \times 19250 = \$4,042.50$

## Financing Car Purchases

The delivered price of a car purchase may be paid in cash. Most buyers, however, make a down payment and take out an installment loan.

Example 1:

- a) The delivered price of Lydia's Zollner's new car is \$23,560. She makes a \$2,000 down payment and pays the balance in 48 monthly payments of \$560. What total amount did Lydia pay for the car? What was the finance charge?

$$\begin{array}{r} \text{Total Paid} = 48 \times 560 = 26880 \\ + 2000 \\ \hline \boxed{\$28,880} \end{array}$$

$$\text{Finance charge} = 28880 - 23500 = \boxed{\$5,320}$$

- b) Steve bought a used truck for \$9,650. He paid for the truck with a \$2,650 down payment and 36 monthly payments of \$234.30. What total amount did the truck cost?

$$\begin{array}{r} 36 \times 234.30 = 8434.80 \\ + 2650 \\ \hline \boxed{\$11,084.80} \end{array}$$

## Cost of Leasing

Lease – a rental agreement.

Leasing a car is similar to renting a car. You use the car for a time and once the lease period is over you turn in the car and walk away.

Before signing a lease, be sure you understand the lease contract, including how many miles you are allowed to drive the car each year.

A Lease Contract - Leasing is based on the idea that you agree to make a monthly payment that covers the depreciation, finance charges, prepaid mileage, and other fees. An additional payment may also be required at the time the lease is signed.

The typical lease contract includes these items:

Lease Price - The price negotiated by you and the dealer. It is the price on which the monthly lease payments are usually figured.

Down Payment - This is an amount that may be required by the lease contract or voluntarily paid by a buyer. A down payment reduces the lease price and results in smaller monthly lease payments.

Residual Value - The expected value of the car at the end of the lease period. This may also be thought of as the depreciated value of the car.

Interest Rate - The rate used to compute the finance charge.

Lease Term - The length of the lease, usually stated in months.

Security Deposit - Money held by the dealer to pay for any possible damage to the leased car. The security deposit is refundable.

Loan Fee - A charge for processing the lease contract and making credit checks.

Registration Fees - The cost of license plates and title registration.

Mileage Allowed - The number of miles the car may be driven each year for the term of the lease.

When you lease a car you must buy insurance and pay for gas, oil, and other routine maintenance expenses.

Example 2:

- a) Jay leased a car at \$307 a month for 48 months with a \$995 down payment. At the end of the lease he was charged \$0.22 a mile for the 2,800 miles he drove over his lease mileage allowance. What were his total lease costs?

$$48 \times 307 = 14,736$$

$$.22 \times 2800 = 616$$

$$\text{Total Lease Cost} = 14736 + 995 + 616 = \boxed{\$16,347}$$

- b) Candance had a two-year lease with \$528 monthly payments. Her lease had a mileage limit of 12,000 a year and was charged 20 cents a mile for each mile over the limit. Her total mileage for the two years was 30,850 miles. What was the total cost of the lease over its term?

$$24 \times 528 = \$12,672$$

$$30850 - 24000 = 6850 \text{ mileage over allowed amount}$$

$$6850 \times .20 = 1370$$

$$\text{Total Lease Cost} = 12672 + 1370 = \boxed{\$14,042}$$

## CLOSURE:

1. Iris bought a luxury car for \$47,851 and made a down payment of \$4,500. She got a special loan rate of 2.1% for 60 months. Iris' monthly payments were \$761.74. What was her finance charge on this car?

$$\begin{array}{r} 761.74 \times 60 = 45704.40 \\ + 4500 \\ \hline 50,204.40 \text{ Total Cost of Car} \end{array}$$

$$\text{Finance Charge} = 50204.40 - 47851 = \boxed{\$ 2353.40}$$

2. Terrance's 4-year lease cost \$332 a month and allowed him to drive 12,000 miles a year. He bought 3,000 extra miles each year for an additional charge of 7 cents a mile. Lease processing fees and a down payment totaled \$418. What was the four-year cost of the lease?

$$4 \times 12 = 48 \text{ months}$$

$$332 \times 48 = 15936$$

$$.07 \times 12000 = 840$$

$$\text{Total Lease Cost} = 15,936 + 840 + 418 = \boxed{\$ 17,194}$$

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

### Worksheet 6-6 Day 1

1. The delivered price of Leah St. Clair's new car is \$22,450. She makes a \$2,800 down payment and pays the balance in 36 monthly payments of \$612.

a) What total amount did Leah pay for the car?

b) How much was the finance charge?

2. Being able to borrow money at a special interest rate of 3.3% was one of the reasons why Otto Kubik bought a new truck. The truck cost \$19,865. Otto made a down payment of \$1,865 and took a 48-month loan with payments of \$405.76 monthly.

a) What was the total amount Otto paid for the truck?

b) How much did he pay in finance charges?

3. Suzanne Madigan leased a car for four years and drove the car 72,000 miles. Her monthly lease charge was \$380.61. The leasing company charged \$0.21 a mile for all miles driven over 60,000 miles. In addition, Suzanne had to pay a charge of \$518.76 to repair a damaged door.
- Find the total of the monthly lease charges.
  - What was the amount of the excess mileage charges?
  - What was the total cost of leasing the car?
4. Foster Pruett leased a van on a 36-month contract at \$418.53 per month. The lease terms allowed him 12,000 miles a year. Foster also purchased 7,500 extra, non-refundable miles at 9¢ a mile. In addition, he had to pay a \$160 lease processing fee and a \$750 down payment. Foster drove the van 40,162 miles in 36 months.
- What was the total of the monthly lease payments?
  - What was the total cost of the extra miles purchase?
  - What were Foster's total lease costs for the 36 months?