

6-5 Day 3 Buying a Car

Math Skill Builder

1. **Multiply** money amounts by percents.

a) $3\% \times \$12,833$

$$.03 \times 12833 = \boxed{\$384.99}$$

b) $20\% \times \$9,384$

$$.20 \times 9384 = \boxed{\$1,876.80}$$

c) $5\% \times \$24,556$

$$.05 \times 24556 = \boxed{\$1,227.80}$$

d) $40\% \times \$16,789$

$$.40 \times 16789 = \boxed{\$6,715.60}$$

Cost of Used Car Purchases

Used cars may be purchased from new car dealers who resell trade-ins, used car dealers, car rental agencies, and individual car owners. The used cars are generally sold “as is”, without warranty.

The *purchase price* for a used car refers to the price on which the buyer and the seller agree and is the price on which sales tax is figured.

The *delivered price* of used cars is equal to the sum of the purchase price, sales tax, and registration fees. The balance due is the delivered price less the down payment.

Example 3:

- a) The purchase price of a 3-year-old car is \$12,450. Other costs include registration fees of \$128 and sales tax of 4%. The buyer made a down payment of \$3,800. What is the delivered price of the car and the balance due?

$$\text{Tax} = 12450 \times .04 = 498$$

$$\text{Delivered Price} = 12450 + 498 + 128 = \boxed{\$13,076}$$

$$\text{Amount Due} = 13076 - 3800 = \boxed{\$9,276}$$

- b) Arnold Knapp agreed to buy a 1-year-old car for \$16,500 cash. Sales tax of 7% is charged on the sale. Other costs include license plates, \$85; title transfer, \$47. What was the total cost of the car?

$$\text{Tax} = 16500 \times .07 = \$1,155$$

$$\text{Total Cost} = 16500 + 1155 + 85 + 47 = \boxed{\$17,787}$$

CLOSURE:

1. The purchase price of a used van bought by Frances Sauger was \$11,370. She paid \$200 extra for a 2-year warranty on the transmission. In her state, warranties are exempt from the 5% sales tax charged on merchandise. Registration costs were \$129. What is the balance due that Frances needs to finance if she makes a down payment of 25% of the purchase price?

$$\text{Tax} = 11370 \times .05 = \$568.50$$

$$\text{Purchase Price} = 11370 + 568.50 + 200 + 129 = \$12,267.50$$

$$\text{Down Payment} = 11370 \times .25 = \$2,842.50$$

$$\text{Balance Due} = 12267.50 - 2842.50 = \boxed{\$9,425}$$

Name: _____ Date: _____ Period: _____

Worksheet 6-5 Day 3

1. A two-year old car was placed on sale for \$17,450. Herschel Cole made an offer to buy the car for \$16,900, which the seller accepted. The sale of the car is subject to a 5.4% sales tax. Registration fees will be \$45. New license plates will cost \$87. What will be the delivered price of the car?

2. Bryce Gregory bought a four-year old car for \$8,060 from a used car dealer. Bryce also purchased a one-year, 12,000 mile limited warranty for \$250 through the dealer. Sales tax of 4% is charged on the purchase except for the warranty that is exempt from state sales tax. Bryce plans to make a down payment of 20% of the car's delivered price and take a loan for the balance.
 - a) What is the delivered price of the used car?

 - b) What is the balance due on the purchase?

3. A car that was bought for \$23,700 nine years ago was offered for sale at \$4,125. Because the car had some body rust, the buyer asked the seller to reduce the price by \$350. The seller agreed. The buyer paid \$167 in registration fees and a 6% sales tax. What was the total cost of this car to the buyer?