

## Word Problem with Percent and Money: Problem Type 1

### • Example 1

An automobile dealer sells a fleet of 10 cars to a taxi company for \$152,500 which includes a \$1500 discount on each car. What was the original price of each car?

Let  $x$  be the original price of one car, in dollars, then  $10x - 1500 \cdot 10$  is the total amount paid, that is,

$$10x - 15,000 = 152,500$$

We solve the equation for  $x$ .

$$10x = 167,500$$

$$x = 16,750$$

Each car originally cost \$16,750.

### ● ● ● CHECK YOURSELF 1

A computer company gives a discount of \$250 per computer to a company that plans to buy 80 computers. The total bill with the discount is \$100,000. What was the original price of each computer?

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### ● ● ● CHECK YOURSELF ANSWER

1. \$1500.

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# 2.25 Exercises

Name \_\_\_\_\_

Section \_\_\_\_\_

Date \_\_\_\_\_

## A N S W E R S

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

Solve the following word problems. Be sure to label the unknowns and to show the equation you use for the solution.

**1. Monthly earnings.** Mike and Stefanie work at the same company and make a total of \$2760 per month. If Stefanie makes \$1400 per month, how much does Mike earn every month?

**2. Appliance costs.** A washer-dryer combination costs \$650. If the washer costs \$360, what does the dryer cost?

**3. Computer costs.** You have \$2350 saved for the purchase of a new computer that costs \$3675. How much more must you save to buy the computer?

**4. Price increases.** The price of an item has increased by \$225 over last year. If the item is now selling for \$965, what was the price last year?

**5. Salaries.** Rafael earns \$35 more per week than Andrew. If their weekly salaries total \$715, what amount does each earn?