

## Lesson 8-7

### Example 1 Predict Using Percent Proportion

**COMPUTERS** A recent survey showed that 22% of middle school students use computers regularly to help them with their homework. Predict how many of the 550 students at Byron Middle School use a computer regularly to help them with their homework.

You can use the percent proportion and the survey results to predict what part of the population of students use computers.

$$\begin{array}{ll} \frac{a}{b} = \frac{p}{100} & \text{Percent proportion} \\ \frac{a}{550} = \frac{22}{100} & \text{Survey results: } 22\% = \frac{22}{100} \\ 100a = 550(22) & \text{Cross products} \\ a = 121 & \text{Simplify.} \end{array}$$

So, about 121 of the Byron Middle School students use computers regularly to help them with their homework.

### Example 2 Predict Using Percent Equation

**CAMP** A survey showed that 46% of elementary school children attend some type of summer camp. Predict how many of the 500 students at Century Elementary School will attend camp this summer.

You need to predict how many of the 500 students will attend camp this summer.

**Words**      What number is 46% of 500?  
**Variable**    Let  $n$  represent the number.  
**Equation**       $n = 0.46 \cdot 500$

$$\begin{array}{ll} n = 0.46 \cdot 500 & \text{Write the percent equation.} \\ n = 230 & \text{Multiply.} \end{array}$$

So, you could predict that about 230 students at Century Elementary School will attend some type of camp this summer.