4-5

Problem Solving: Draw a Picture and Write an Equation

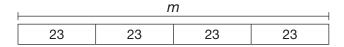
Zoo keepers divided some land into 4 sections for the monkeys at the zoo. Each section has 23 monkeys. How many monkeys are at the zoo?

Read and Understand

Choose a variable for the unknown. The unknown is the total number of monkeys at the zoo.

Let m = the total number of monkeys.

Draw a picture to show that the total number of monkeys is divided into 4 equal sections of 23 monkeys.



Plan and Solve

Write an equation using the variable and the picture.

 $m \div 4 = 23 \leftarrow \text{Use division}.$

Solve the equation.

$$m \div 4 = 23$$

$$m \div 4 \times 4 = 23 \times 4$$

$$m = 92$$

There are 92 monkeys at the zoo.

Write an equation for 1. Solve each problem.

1. Juan has 6 times as many basketball cards as Nick. If Juan has 192 basketball cards, how many does Nick have?

192						
	Χ	Х	Х	Х	Х	Х

- **2.** Several sixth grade classes are going on a field trip to a planetarium. The teachers divided the classes into 19 groups. There are 7 students in each group. How many students are going to the planetarium? Use the equation $c \div 19 = 7$.
- **3.** Each bus for a field trip can carry 27 students. If 216 students are going on the field trip, how many buses are needed? Use the equation 27n = 216.