#### **Comparison Problems**

COMMON CORE STANDARD—4.OA.2

Use the four operations with whole numbers to solve problems.

#### Draw a model. Write an equation and solve.

1. Stacey made a necklace using 4 times as many blue beads as red beads. She used a total of 40 beads. How many blue beads did Stacey use?

**Think:** Stacey used a total of 40 beads. Let *n* represent the number of red beads.



2. At the zoo, there were 3 times as many monkeys as lions. Tom counted a total of 24 monkeys and lions. How many monkeys were there?

monkeys 
$$n$$
  $n$   $n$  lions  $n$   $n$   $n$ 

$$5 \times n = 40; 5 \times 8 = 40;$$
  
 $4 \times 8 = 32$  blue beads

$$\frac{4 \times n}{3 \times 6} = 24; 4 \times 6 = 24; 3 \times 6 = 18 \text{ monkeys}$$

**3.** Fred's frog jumped 7 times as far as Al's frog. The two frogs jumped a total of 56 inches. How far did Fred's frog jump?

$$8 \times n = 56; 8 \times 7 = 56;$$

 $7 \times 7 = 49$  inches

**4.** Sheila has 5 times as many markers as Dave. Together, they have 18 markers. How many markers does Sheila have?

Sheila 
$$n$$
  $n$   $n$   $n$   $n$  18

Dave  $n$ 

$$6 \times n = 18; 6 \times 3 = 18;$$

5 imes 3 = 15 markers

# Problem Solving (Real world)

- **5.** Rafael counted a total of 40 white cars and yellow cars. There were 9 times as many white cars as yellow cars. How many white cars did Rafael count?
- **6.** Sue scored a total of 35 points in two games. She scored 6 times as many points in the second game as in the first. How many more points did she score in the second game?

### 36 white cars

25 more points

**P23** 

#### **Lesson Check** (4.OA.2)

- 1. Sari has 3 times as many pencil erasers as Sam. Together, they have 28 erasers. How many erasers does Sari have?
- 2. In Sean's fish tank, there are 6 times as many goldfish as guppies. There are a total of 21 fish in the tank. How many more goldfish are there than guppies?

#### 21 erasers

# 15 goldfish

#### **Spiral Review** (4.0A.1, 4.0A.3, 4.NBT.2)

- 3. Barbara has 9 stuffed animals. Trish has3 times as many stuffed animals as Barbara.How many stuffed animals does Trish have?
- 4. There are 104 students in the fourth grade at Allison's school. One day, 15 fourth-graders were absent. How many fourth-graders were at school that day?

### 27 stuffed animals

# 89 fourth-graders

- 5. Joshua has 112 rocks. Jose has 98 rocks. Albert has 107 rocks. Write the boy's names in order from the least to the greatest number of rocks owned.
- **6.** Alicia has 32 stickers. This is 4 times as many stickers as Benita has. How many stickers does Benita have?

# Jose, Albert, Joshua

### 8 stickers