**Make a plan.**

I will start with the fraction of serves Tiffany returned and use logical reasoning to solve the problem.

**Carry out your plan.**

I know that Tiffany returned $\frac{1}{2}$ of her serves. I need to find an equivalent fraction with 10 as the denominator to figure out how many serves Tiffany returned.

$\frac{1}{2}=\frac{5}{10}$

So, Tiffany returned 5 serves.

**What facts do you know?**

Each person was served 10 balls.

Gina returned less than Julio, but more than Tiffany.

Tiffany returned $\frac{1}{2}$ of the serves.

No one returned more than 9 serves.

Julio returned an even number of serves, and Gina returned an odd number of serves.

**What do you need to find?**

How many serves did each person return?

Gina, Julio, and Tiffany are at their tennis lesson, where they practiced returning serves. Each person was served 10 tennis balls. Gina returned less serves than Julio, but more than Tiffany. Tiffany returned $\frac{1}{2}$ of her serves. Julio returned an even number of serves. Gina returned an odd

number of serves. No one returned more than 9 serves. How many serves did each person return?

**Reteach**

**Step 2**

Plan

**Step 3**

Solve

**Step 1**

Understand

**Grade 4 • Chapter 8** Fractions

**69**

*Problem Solving: Use Logical Reasoning*

**Lesson 8**

Name Date

**Reteach**

Sheldon used flour, sugar, and blueberries to make muffins. The amounts he used are $\frac{1}{2}$ cup, $\frac{1}{4}$ cup, and $\frac{3}{4}$ cup. He used twice as much flour than sugar and the greatest amount used was blueberries. How much of each ingredient did he use?

Leonardo has 3 times as many pencils as Sheldon. Sheldon has

2 times as many pencils as Tess. Tess has 5 pencils. How many pencils do Leonardo and Sheldon each have?

Cora has 3 Labrador retrievers. Their names are Buddy, Cody, and

Cooper. One is chocolate, one is black, and one is yellow in color. Buddy is not chocolate. Cody is not chocolate or black. What is the color of each dog?

**Make sure your answer is reasonable.**

Based on the information given, the number of serves figured for each person makes sense. So, the answer is reasonable.

**Step 4**

Check

Gina returned less serves than Julio and more than Tiffany. She returned an odd number of serves.

**Could Gina have returned 9 serves?** No, because she returned less than Julio, and no one returned more than 9.

**Could Gina have returned 7 serves?** Yes. 7 is an odd number more than 5 and less than 9. So, Gina returned 7 serves.

Julio returned an even number of serves and more serves than Gina. No one returned more than 9 serves. So, Julio returned 8 serves.

**Step 3**

Solve

**Grade 4 • Chapter 8** Fractions

**70**

**3.**

**2.**

**1.**

**Solve each problem by using logical reasoning.**

*(continued)*

*Problem Solving: Use Logical Reasoning*

**Lesson 8**

Name Date