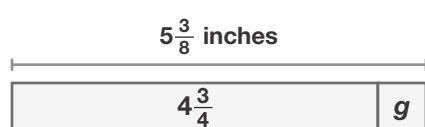## Another Look!

Each Monday in science class, students measure the height of their plants. In week 3, Andrew's plant was $4\frac{3}{4}$ inches tall. In week 4, his plant was $5\frac{3}{8}$ inches tall. How much had the plant grown from week 3 to week 4?

Tell how you can use math to model the problem.

- I can use math I know to help solve the problem.

- I can use bar diagrams and equations to represent and solve this problem.

Draw a bar diagram and write an equation to solve.

$5\frac{3}{8}$ inches

| $4\frac{3}{4}$ | g |

$$5\frac{3}{8} = 4\frac{11}{8}$$
$$-4\frac{3}{4} = 4\frac{6}{8}$$
$$\frac{5}{8}$$

$$4\frac{3}{4} + g = 5\frac{3}{8}$$

The plant grew $\frac{5}{8}$ inch.

> When you model with math, you use the math you know to solve new problems.

Model with Math

Mrs. Lohens made curtains for her children's bedrooms. She used $4\frac{3}{4}$ yards of fabric for Nicky's room and $6\frac{5}{8}$ yards for Linda's room. How much fabric did she use in all?

1. Draw a diagram and write an equation to represent the problem.

2. Solve the equation. What fraction computations did you do?

3. How much fabric did Mrs. Lohens use for the curtains?

Fans in the Bleachers

In the bleachers at the basketball game, $\frac{1}{4}$ of the fans are adult men, and $\frac{5}{12}$ are adult women. What fraction of the fans are adults? What fraction of the fans are children?

4. **Make Sense and Persevere** What do you know and what do you need to find?

5. **Reasoning** What quantities and operations will you use to find the fraction of the fans that are adults? that are children?

When you model with math, you decide what steps need to be completed to find the final answer.

6. **Critique Reasoning** Phyllis says you have to know the number of fans in order to determine the fraction of the fans that are children. Is she right? Explain.

7. **Model with Math** Draw a diagram and use an equation to help you find the fraction of the fans that are adults. Then draw a diagram and use an equation to help you find the fraction of the fans that are children.