

## KEY CONCEPT OVERVIEW

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In Lessons 35 through 40, students multiply a whole number by a fraction or a mixed number, solve word problems involving fractions, and create **line plots**.

You can expect to see homework that asks your child to do the following:

- Write expressions in unit form to solve (e.g.,  $6 \times \frac{2}{5} = 6 \times 2$  fifths).
- Rewrite repeated addition problems as multiplication problems (e.g.,  $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 3 \times \frac{1}{2}$ ).
- Multiply a whole number by a fraction (e.g.,  $3 \times \frac{1}{2}$ ).
- Use the **distributive property** to multiply a whole number by a mixed number. (See Sample Problem.)
- Use the **RDW process** to solve word problems involving multiplication of a whole number by a fraction or a mixed number.
- Interpret information from a chart and create a line plot.

## SAMPLE PROBLEM (From Lesson 37)

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Solve the following by using the distributive property.

$$\begin{aligned} 3 \times 2\frac{4}{6} &= 3 \times \left( 2 + \frac{4}{6} \right) \\ &= (3 \times 2) + \left( 3 \times \frac{4}{6} \right) \\ &= 6 + \frac{12}{6} \\ &= 6 + 2 \\ &= 8 \end{aligned}$$

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at [GreatMinds.org](http://GreatMinds.org).

**HOW YOU CAN HELP AT HOME**

- Choose one ingredient from your child’s favorite recipe. Ask him to determine how much of that ingredient you would need if you made the recipe four times. Choose another ingredient and repeat the activity.
- Ask your child to use a measuring cup (e.g.,  $\frac{1}{4}$  cup,  $\frac{1}{3}$  cup,  $\frac{2}{3}$  cup, or  $\frac{3}{4}$  cup) to count how many measures of water are required to fill a larger container such as a jar, a drinking glass, or a bowl. Ask her to write a multiplication expression that could be used to find the amount of water needed to fill the container, and then ask her to solve. For example, if a drinking glass can hold three  $\frac{3}{4}$ -cup measures worth of water, the capacity of the drinking glass can be expressed as  $3 \times \frac{3}{4}$  cup, which is equal to  $2\frac{1}{4}$  cups.

**TERMS**

**Distributive property:** A property of multiplication that can be used to break apart a problem into an easier problem. For example,  $4 \times 6\frac{2}{3} = (4 \times 6) + \left(4 \times \frac{2}{3}\right)$ .

**RDW process:** Read, Draw, Write—A three-step process used in solving word problems that requires students to **R**ead the problem for understanding; **D**raw a model (e.g., a tape diagram) to help make sense of the problem; and **W**rite an equation and a statement of the answer.

**MODELS**

**Line Plot**

