

KEY CONCEPT OVERVIEW

In Lessons 1 and 2, students learn to multiply multi-digit whole numbers by using several strategies. Additionally, they learn to **round** numbers to the nearest ten, hundred, thousand, or ten thousand as a strategy to help them **estimate** the product (answer) of multiplication problems.

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

- Find the product of multi-digit multiplication **expressions**.
- Round numbers in multiplication problems to estimate the answer.
- Solve word problems that involve multi-digit multiplication.

SAMPLE PROBLEMS (From Lesson 1)

Find the products. Show your thinking.

$$\begin{aligned} 7 \times 9 \\ = \mathbf{63} \end{aligned}$$

$$\begin{aligned} 7 \times 90 \\ = (7 \times 9) \times 10 \\ = \mathbf{63} \times 10 \\ = \mathbf{630} \end{aligned}$$

$$\begin{aligned} 70 \times 90 \\ = (7 \times 10) \times (9 \times 10) \\ = (7 \times 9) \times 100 \\ = \mathbf{6,300} \end{aligned}$$

$$\begin{aligned} 70 \times 900 \\ = (7 \times 9) \times (10 \times 100) \\ = \mathbf{63,000} \end{aligned}$$

LEARN MORE by viewing a video on the decomposition of a number bond to solve multiplication and division problems. Visit eurmath.link/number-bond-decomp.

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- Multiply by 10, 100, and 1,000. Give your child a multiplication expression, and have him tell you the product (answer). For example,

$$3 \times 10 = 30; 3 \times 100 = 300; 3 \times 1,000 = 3,000$$

$$50 \times 10 = 500; 50 \times 100 = 5,000; 50 \times 1,000 = 50,000$$

- Review rounding of a whole number with your child. For example,

What is 19 rounded to the nearest ten? (20)

What is 727 rounded to the nearest hundred? (700)

What is 3,815 rounded to the nearest thousand? (4,000)

TERMS

Estimate: Approximate the value of a quantity or number. For example, you can estimate the product of 22×3 as about 60 (22 is very close to the number 20, and $20 \times 3 = 60$).

Expression: Any combination of sums, differences, products, or divisions of numbers that evaluates to a number. Expressions do not have an equal sign (e.g., $600 + 3 + 0.07$).

Round: Replace a number with another number of approximately the same value. For example, 8,261 rounded to the nearest hundred is 8,300.