

KEY CONCEPT OVERVIEW

In Lessons 28 and 29, students learn to solve multi-step word problems using long division.

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

- Divide multi-digit numbers using long division.
- Solve multi-step word problems that involve division.

SAMPLE PROBLEM (From Lesson 29)

Jeremiah has 2,440.8 kilograms of cashews to deliver in equal amounts to 18 stores. If 11 of the stores are in New York, how many kilograms of cashews will be delivered to stores in New York?

$$2,440.8 \div 18 = 135.6$$

$$135.6 \times 11 = 1,491.6$$

$$\begin{array}{r}
 \overline{) 2,440.8} \\
 \underline{- 18} \\
 \overline{64} \\
 \underline{- 54} \\
 \overline{100} \\
 \underline{- 90} \\
 \overline{108} \\
 \underline{- 108} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \\
 \times \\
 \overline{1356} \\
 + 13560 \\
 \overline{1,491.6}
 \end{array}$$

1,491.6 kilograms of cashews will be delivered to stores in New York.

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

- Play the Multiply the Dice number game with your child to practice multi-digit multiplication. You can use two dice for two-digit numbers, three dice for three-digit numbers, or four dice for four-digit numbers.
 1. You can select up to four dice to roll to create a multi-digit number.
 2. Your child can select up to three dice to roll to create another multi-digit number.
 3. You write the multiplication expression using the two numbers and say, “First, estimate the answer, and then solve the problem.”

HOW YOU CAN HELP AT HOME

(CONTINUED)

For example, you roll a 6, a 2, and a 5, which represents 625. She rolls a 1 and a 3, which represent 13. You write 625×13 and say, “First, estimate the answer, and then solve the problem.”

Answers: $625 \times 13 \approx 600 \times 10 = 6,000$; $625 \times 13 = 8,125$

Challenge: Change the whole numbers of the first number rolled into a decimal number (e.g., 62.5×13 , 6.25×13 , or 0.625×13).

Answers:

$62.5 \times 13 \approx 60 \times 10 = 600$; $62.5 \times 13 = 812.5$

$6.25 \times 13 \approx 6 \times 10 = 60$; $6.25 \times 13 = 81.25$

$0.625 \times 13 \approx 1 \times 10 = 10$; $0.625 \times 13 = 8.125$

- Play the Divide the Dice number game with your child to practice multi-digit division. You can use two dice for two-digit numbers, three dice for three-digit numbers, or four dice for four-digit numbers.
 1. You can select up to four dice to roll to create a multi-digit number to represent the whole.
 2. Your child selects two dice to roll to create a two-digit number to represent the divisor.
 3. You write the division expression using the whole and the divisor and say, “First, estimate the answer, and then solve the problem.”

For example, you roll a 6, a 1, and a 1, which represents 611. She rolls a 2 and a 6, which represent 26. You write $611 \div 26$ and say, “First, estimate the answer, and then solve the problem.”

Answers: $611 \div 26 \approx 600 \div 30 = 20$; $611 \div 26 = 23.5$

Challenge: Change the whole numbers of the first number rolled into a decimal number (e.g., $61.1 \div 26$ or $6.11 \div 26$).

Answers:

$61.1 \div 26 \approx 60 \div 30 = 2$; $61.1 \div 26 = 2.35$

$6.11 \div 26 \approx 6 \div 30 = 0.2$; $6.11 \div 26 = 0.235$