

KEY CONCEPT OVERVIEW

In Lessons 1 through 3, students explore tenths. They've already learned to express tenths in **fraction form**. Now they learn how to write the **decimal form** of tenths.

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

- Express numbers in fraction form and decimal form (e.g., $\frac{6}{10} = 0.6$).
- Shade **area models** to express given numbers of ones and tenths.
- Use a centimeter ruler to draw line segments that match given lengths.
- Write **mixed numbers** in decimal form (e.g., $3\frac{1}{10} = 3.1$).
- Represent numbers with **place value disks**, on the **number line**, and in **expanded form**.

SAMPLE PROBLEM (From Lesson 3)

Draw disks to represent 3 tens 5 ones 2 tenths using tens, ones, and tenths. Then, show the expanded form of the number in fraction form and in decimal form.

3 tens 5 ones 2 tenths



Fraction expanded form

$$(3 \times 10) + (5 \times 1) + \left(2 \times \frac{1}{10}\right) = 35\frac{2}{10}$$

Decimal expanded form

$$(3 \times 10) + (5 \times 1) + (2 \times 0.1) = 35.2$$

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

- On index cards or small pieces of paper, write each of the fractions, in tenths, from $\frac{1}{10}$ to $\frac{10}{10}$ (i.e., $\frac{1}{10}, \frac{2}{10}, \frac{3}{10}, \dots, \frac{10}{10}$). On another set of index cards, write each of the decimal numbers, in tenths, from 0 to 1.0 (i.e., 0.1, 0.2, 0.3, ..., 1.0). Create a game using the cards. For example, play a memory game to create matches of equivalent amounts (e.g., $\frac{1}{10}$ and 0.1). The person with the most matches wins. For a challenge, change the objective to creating matches of pairs that add up to one (e.g., $\frac{1}{10}$ and $\frac{9}{10}$ or 0.2 and $\frac{8}{10}$).

TERMS

Decimal form: A number written in the form of a decimal. For example, 15 hundredths in decimal form is 0.15.

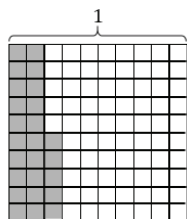
Expanded form: Representing a number as an addition expression or number sentence to show the value of each digit. For example, in fraction expanded form, $13\frac{42}{100} = (1 \times 10) + (3 \times 1) + \left(4 \times \frac{1}{10}\right) + \left(2 \times \frac{1}{100}\right)$, and in decimal expanded form, $13.42 = (1 \times 10) + (3 \times 1) + (4 \times 0.1) + (2 \times 0.01)$.

Fraction form: A number written in the form of a fraction. For example, 15 hundredths in fraction form is $\frac{15}{100}$.

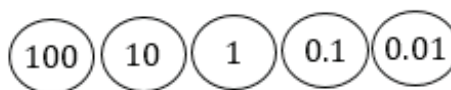
Mixed number: A number made up of a whole number and a fraction (e.g., $13\frac{42}{100}$).

MODELS

Area Model



Place Value Disks



Number Line

