

## KEY CONCEPT OVERVIEW

---

In Lessons 22 through 28, students work with **fractions greater than 1**.

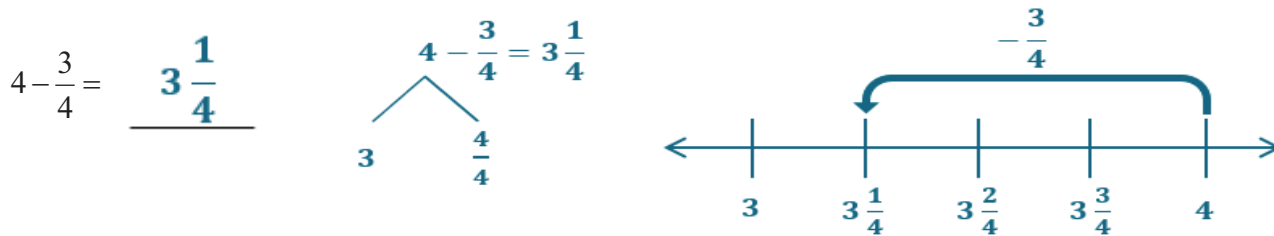
You can expect to see homework that asks your child to do the following:

- Add fractions to whole numbers and subtract fractions from whole numbers.
- Use tape diagrams, number bonds, number lines, **benchmarks**, and area models to add, subtract, and compare fractions.
- Multiply whole numbers by **unit fractions**.
- Convert fractions greater than 1 to **mixed numbers**.
- Convert mixed numbers to fractions greater than 1.
- Compare fractions by using  $<$ ,  $>$ , or  $=$ .
- Create a **line plot** and solve problems related to its data.

## SAMPLE PROBLEM (From Lesson 22)

---

Solve by using a number bond. Draw a number line to represent the **number sentence**.



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

---

- Practice renaming whole numbers as a whole number and a fraction (e.g., 5 as  $4 \frac{4}{4}$ ). This will help your child as he is tasked with subtracting a fraction from a whole number.
- Find 6 pencils of different lengths. Help your child to measure each pencil to the nearest quarter inch, and then create a chart that contains the measurements. Next, ask her to use the data to create a line plot (similar to the example on the following page), and then to create two questions based on the data.

**TERMS**


---

**Benchmark:** A reference point by which something is measured. The numbers 0,  $\frac{1}{2}$ , and 1 are benchmarks that can be used to help compare fractions. For example,  $\frac{3}{8}$  is less than  $\frac{1}{2}$ , and  $\frac{4}{6}$  is greater than  $\frac{1}{2}$ ; therefore,  $\frac{3}{8}$  is less than  $\frac{4}{6}$ .

**Decompose/Decomposition:** To break apart into smaller parts. There are many ways to show decomposition, for example,  $4 = 3 + \frac{3}{3}$  or  $\frac{11}{3} = \frac{9}{3} + \frac{2}{3}$  or  $2\frac{2}{3} = 1\frac{2}{3} + 1$ .

**Fraction greater than 1:** A fraction with a numerator that is greater than the denominator. For example,  $\frac{5}{4}$  is a fraction greater than 1.

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

**Number sentence:** An equation for which both expressions are numerical and can be evaluated to a single number. For example,  $\frac{1}{4} + \frac{1}{4} = \frac{2}{4}$  and  $\frac{1}{10} + \frac{2}{10} + \frac{3}{10} = \frac{6}{10}$  are number sentences. Number sentences do not have unknowns.

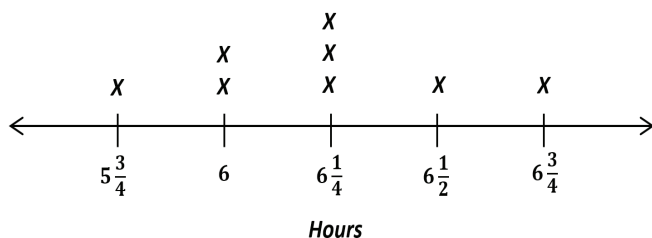
**Unit fraction:** A fraction with a numerator of 1. For example,  $\frac{1}{2}$ ,  $\frac{1}{3}$ , and  $\frac{1}{4}$  are all unit fractions.

**MODELS**


---

**Line Plot**

*Time Spent Doing Homework in One Week*



$X = 1$  student