

KEY CONCEPT OVERVIEW

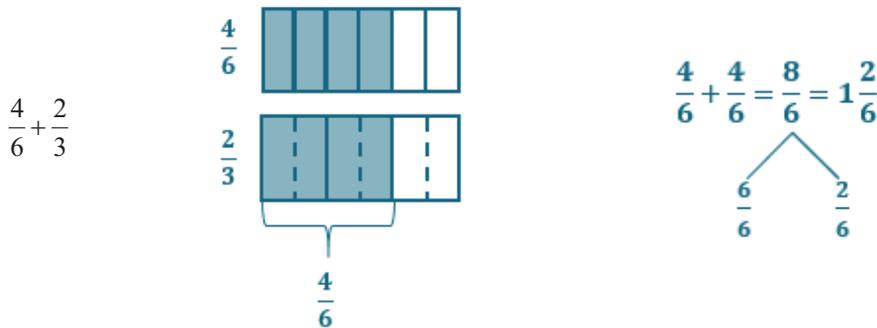
In Lessons 16 through 21, students add and subtract fractions. They use **number bonds**, **number lines**, and **tape diagrams**, as needed, to model the addition and subtraction. Students apply what they have learned to solve word problems.

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

- Add and subtract fractions with like units (e.g., $\frac{3}{6} + \frac{2}{6}$) and unlike units (e.g., $\frac{2}{6} + \frac{1}{3}$).
- Record answers as **mixed numbers**, where applicable (e.g., $\frac{11}{8} = 1\frac{3}{8}$).
- Use the **RDW process** to solve word problems.

SAMPLE PROBLEM (From Lesson 21)

Use a tape diagram to represent each addend. **Decompose** one of the tape diagrams to make like units. Then write the complete **number sentence**. Use a number bond to write the sum as a mixed number.



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

- Ask your child to teach you how to add and subtract fractions. Teaching you will help him to explain his thinking as he talks through the process. Ask him to explain how the models (the number bond, number line, and tape diagram) can help him solve.
- Together, find one of your child's favorite recipes. Look at the amount needed for each ingredient. Pose the following questions: What happens if we want to make two batches of the recipe instead of one? How much of each ingredient will we need?

TERMS

Decompose/Decomposition: To break apart into smaller parts. There are multiple ways to show decomposition, for example, $1\frac{3}{6} = \frac{6}{6} + \frac{3}{6}$, or $\frac{9}{6} = \frac{6}{6} + \frac{3}{6}$, or partitioning a tape diagram to make like units. (See Sample Problem.)

Mixed number: A number made up of a whole number and a fraction, for example, $13\frac{42}{100}$.

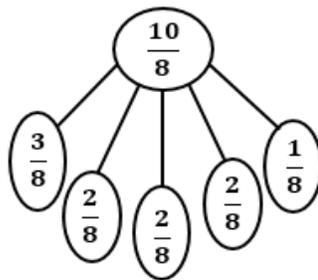
Number sentence: An equation for which both expressions are numerical and can be evaluated to a single number. For example, $\frac{1}{4} + \frac{1}{4} = \frac{2}{4}$ and $\frac{1}{10} + \frac{2}{10} + \frac{3}{10} = \frac{6}{10}$ are number sentences. Number sentences do not have unknowns.

RDW process: Read, Draw, Write is a three-step process used in solving word problems that requires students to read the problem for understanding, draw a model (e.g., a tape diagram) to help make sense of the problem, and write an equation and a statement of the answer.

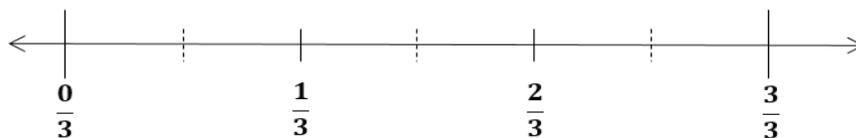
Unit form: A number expressed in terms of its units. For example, $\frac{15}{100}$ written in unit form is 1 tenth 5 hundredths or 15 hundredths.

MODELS

Number Bond



Number Line



Tape Diagram

