EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

In Lessons 1 through 4, students identify and draw **points**, **lines**, line **segments**, **rays**, **angles**, **perpendicular** lines, and **parallel** lines.

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

- Draw figures containing points, lines, line segments, rays, and angles.
- Determine whether an angle is **acute**, **right**, or **obtuse**.
- Construct acute, right, and obtuse angles.
- Identify and draw perpendicular and parallel lines.

SAMPLE PROBLEM *(From Lesson 1)*

Use the following directions to draw a figure in the box to the right.

a. Draw two points: A and B.

b. Use a straightedge to draw $\overline{AB}$.

c. Draw a new point, point C, that is not on $\overline{AB}$.

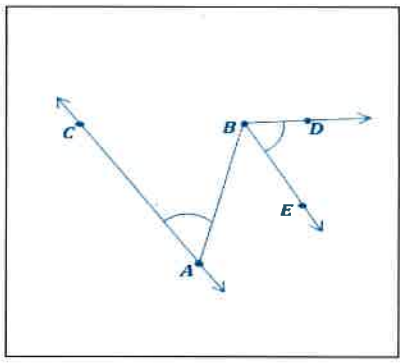
d. Use a straightedge to draw $\overleftrightarrow{AC}$.

e. Draw point D that is not on $\overline{AB}$ or $\overleftrightarrow{AC}$.

f. Use a straightedge to draw $\overrightarrow{BD}$.

g. Draw point E that is not on $\overline{AB}$, $\overleftrightarrow{AC}$, or $\overrightarrow{BD}$.

h. Use a straightedge to draw $\overrightarrow{BE}$.



i. Use the points you've already labeled to name two angles. $\angle BAC, \angle EBD$

j. Identify the angles you've labeled by drawing an arc to indicate the position of the angles.

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

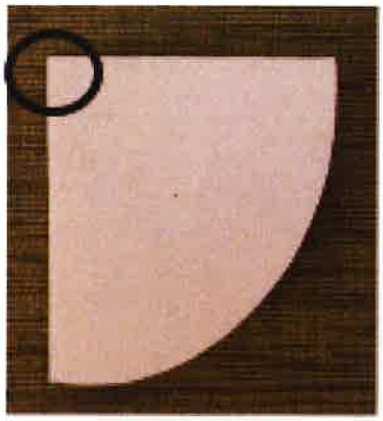
- With your child, look around your home for acute, right, and obtuse angles and for perpendicular and parallel lines. You'll likely discover that right angles, perpendicular lines, and parallel lines are the easiest to find! You might find acute and obtuse angles, among other places, on clocks, on the molding around windows and doors, on windows that crank open, and on hinged picture frames.

TERMS

Acute angle: An angle with a measure less than 90 degrees.
Angle: Two rays that share a common vertex (they meet at the same point). For example, $\overrightarrow{BA}$ and $\overrightarrow{BC}$ have the common vertex of point B and form $\angle ABC$.
Line: A straight path that extends in both directions without end. A line can be denoted, for example, as line AB or $\overleftrightarrow{AB}$.
Obtuse angle: An angle with a measure greater than 90 degrees but less than 180 degrees.
Parallel: Two lines that do not intersect. Parallel lines can be denoted, for example, as $\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$.
Perpendicular: Formed by two lines, line segments, or rays intersecting to form a 90 degree angle. Perpendicular lines are denoted by the symbol $\perp$, for example, $\overleftrightarrow{AB} \perp \overleftrightarrow{CD}$.
Point: A precise location in the plane designated by drawing a dot and labeling the dot with a letter. For example, a point can be denoted as point B.
Ray: A point and the set of all points extending in one direction along a line. A ray is designated by an endpoint and an arrow and denoted, for example, as ray AB or $\overrightarrow{AB}$.
Right angle: An angle (formed by perpendicular lines) with a measure of 90 degrees.
Segment: Two points, A and B, together with the set of points on line AB between A and B. A segment is designated by two endpoints and denoted, for example, as segment AB or $\overline{AB}$.

MODELS

Right Angle Template



EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

Lessons 9 through 11 focus on **angle** measurement. Students problem solve as they compose angles by using **pattern blocks**. Students also use what they know about the measure of **right angles**, **straight angles**, and angles around a point (360°) to solve for unknown angle measurements. (See Sample Problem.)

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

- Compose angles of different measures by using pattern blocks.
- Determine unknown angle measurements mathematically and then use a **protractor** to verify the measurements.

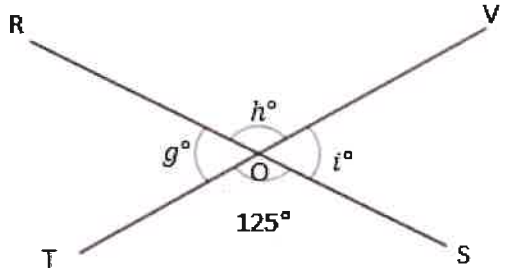
SAMPLE PROBLEM *(From Lesson 11)*

Write an equation and solve for the unknown angles numerically.

O is the intersection of $\overline{RS}$ and $\overline{TV}$.

$\angle TOS$ is 125°.

$g^\circ =$ 55° $\quad h^\circ =$ 125° $\quad i^\circ =$ 55°



$180° - 125° = i°$

$i° = 55°$

$55° + h° = 180°$

$h° = 125°$

$125° + g° = 180°$

$g° = 55°$

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

- Prompt your child to lay two pieces of uncooked spaghetti on a piece of paper so they intersect at their midpoints. (She might want to tape the pieces down so they don't move.) Next, direct her to use a protractor to measure any one of the angles. Finally, ask her to determine the measure of the other three angles mathematically (similar to what was done in the Sample Problem).

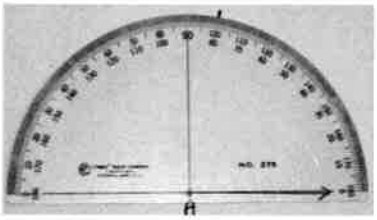
HOW YOU CAN HELP AT HOME
(continued)

- Draw a right angle. Ask your child to split the right angle into two smaller angles by drawing a ray that extends from the right angle. Prompt your child to measure one of the angles by using a protractor, and then ask him to mathematically determine the measure of the other angle (i.e., subtract the measured angle from 90° or add up to 90°). As a final step, he can use the protractor to prove that his calculation of the angle measure is correct. (Extend the activity by drawing and using a straight angle instead.)

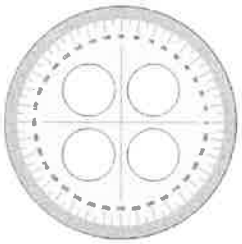
TERMS

Angle: Two rays that share a common vertex (i.e., they meet at the same point). For example, $\overrightarrow{BA}$ and $\overrightarrow{BC}$ have the common vertex of point B and form $\angle ABC$.
Right angle: An angle (formed by perpendicular lines) with a measure of 90 degrees.
Straight angle: An angle that measures 180 degrees.

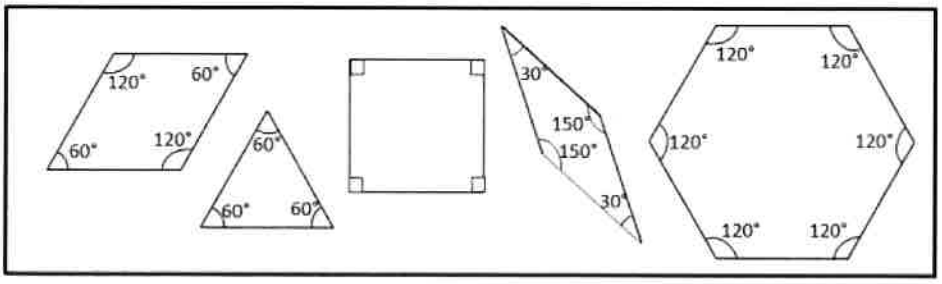
MODELS



180° Protractor



360° Protractor



Pattern Blocks

KEY CONCEPT OVERVIEW

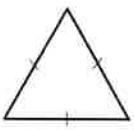
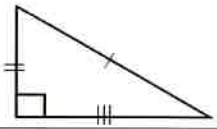
In Lessons 12 through 16, students explore **lines of symmetry** and characteristics of triangles and **quadrilaterals**.

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

- Find and draw lines of symmetry.
- Given half of a figure and the line of symmetry, draw the other half of the figure.
- Classify triangles by side lengths (e.g., **equilateral**, **isosceles**, **scalene**) and by angle measurements (e.g., **acute**, **right**, **obtuse**).
- Draw triangles that fit different classifications (e.g., acute and scalene).
- Name quadrilaterals, identify attributes (i.e., characteristics) that define them, and construct them based on given attributes.

SAMPLE PROBLEM *(From Lesson 13)*

Classify each triangle by its side lengths and angle measurements. Circle the correct names.

	Classify Using Side Lengths	Classify Using Angle Measurements
a. 	(Equilateral) Isosceles Scalene	(Acute) Right Obtuse
b. 	Equilateral Isosceles (Scalene)	Acute (Right) Obtuse

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 look around the house for objects that have lines of symmetry. Examples include the headboard of a bed, dressers, chairs, couches, and place mats. Ask him to show where the line of symmetry would be and what makes it a line of symmetry. Be careful of objects such as doors and windows. They could have a line of symmetry, but if there's a knob or crank on just one side, then they are not symmetrical.
- Ask your child to name and draw all the quadrilaterals she can think of (e.g., **square**, **rectangle**, **parallelogram**, **trapezoid**, and **rhombus**). Alternatively, prompt her to draw a quadrilateral and then ask someone else to name it.

TERMS

Acute angle: An angle with a measure less than 90 degrees.
Equilateral triangle: A triangle with three sides of equal length.
Isosceles triangle: A triangle with at least two sides of equal length.
Line of symmetry: A line through a figure that creates two halves that match exactly.
Obtuse angle: An angle with a measure greater than 90 degrees but less than 180 degrees.
Parallelogram: A quadrilateral with two pairs of parallel sides. For example, squares, rectangles, and rhombuses are parallelograms.
Quadrilateral: Any polygon with four sides. For example, squares, rectangles, trapezoids, rhombuses, and parallelograms are all quadrilaterals.
Rectangle: A parallelogram with four 90 degree angles.
Rhombus: A parallelogram with all sides of equal length. A square is an example of a rhombus.
Right angle: An angle (formed by perpendicular lines) with a measure of 90 degrees.
Scalene triangle: A triangle with no sides of equal length and no angles of equal measure.
Square: A rectangle with all sides of equal length.
Trapezoid: A quadrilateral with at least one pair of parallel sides. Squares, rectangles, rhombuses, and parallelograms are examples of trapezoids as is any quadrilateral with one or two pairs of parallel sides.

EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

In Lessons 1 through 6, students explore fraction equivalence. They show how fractions can be expressed as the sum of smaller fractions by using different models.

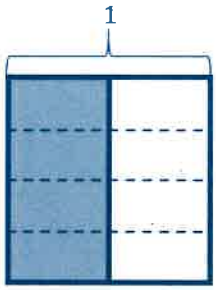
You can expect to see homework that asks your child to do the following:

- **Decompose** fractions as a sum of **unit fractions** (e.g., $\frac{3}{4}=\frac{1}{4}+\frac{1}{4}+\frac{1}{4}$), and write the **equivalent multiplication sentence** (e.g., $\frac{3}{4}=3\times\frac{1}{4}$).
- Draw and label **tape diagrams** to show decomposition of a fraction and to prove that two fractions are equivalent.
- Draw **area models** to show decomposition and to find equivalent fractions.

SAMPLE PROBLEM *(From Lesson 5)*

Draw an area model to show the decomposition represented by the **number sentence** below. Represent the decomposition as a sum of unit fractions and as a multiplication sentence.

$\frac{1}{2}=\frac{4}{8}$



$$\frac{1}{2}=\frac{1}{8}+\frac{1}{8}+\frac{1}{8}+\frac{1}{8}=\frac{4}{8}$$

$$\frac{1}{2}=4\times\frac{1}{8}=\frac{4}{8}$$

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

- Explore fractions as you make sandwiches. Give a sandwich to your child. Ask her how many whole sandwiches she has. Cut your child's sandwich in half. Ask her again how many whole sandwiches she has. Point to one half. Ask her to say the fraction that the piece represents. Point to the other half. Ask her again to say the fraction. Finally, ask her to say a number sentence that represents the decomposition ($1=\frac{1}{2}+\frac{1}{2}$) or ($1=2\times\frac{1}{2}$). Continue with this activity by decomposing the halves into smaller units (e.g., fourths, eighths).

HOW YOU CAN HELP AT HOME
(continued)

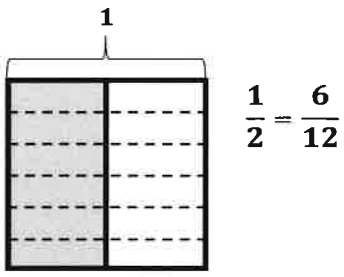
- Use measuring cups to show equivalence. Measure $\frac{2}{3}$ cup of water. Give your child the water and a $\frac{1}{3}$-cup measuring cup. Ask him how many times he will be able to fill the $\frac{1}{3}$-cup measuring cup with the water. Prompt him to prove it and then to say the decomposition in a number sentence, first using addition and then using multiplication (e.g., $\frac{2}{3}=\frac{1}{3}+\frac{1}{3}$ and $\frac{2}{3}=2\times\frac{1}{3}$).

TERMS

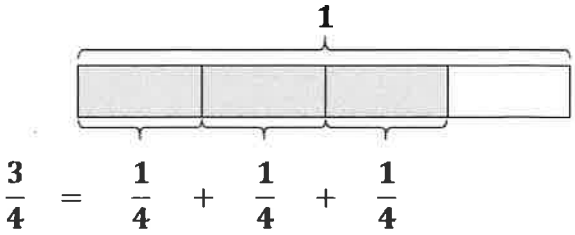
Decompose/Decomposition: To break apart into smaller parts. There are multiple ways to show decomposition. For example, write $1=\frac{1}{5}+\frac{1}{5}+\frac{1}{5}+\frac{1}{5}+\frac{1}{5}$ or $1=\frac{2}{5}+\frac{2}{5}+\frac{1}{5}$, or partition a tape diagram into smaller parts to show equivalence, such as partitioning 1 whole into 5 fifths.
Equivalent: Names the same amount. For example, $2\times\frac{1}{3}=\frac{2}{3}$ is equivalent to $\frac{1}{3}+\frac{1}{3}=\frac{2}{3}$.
Multiplication sentence: A multiplication equation in which both expressions are numerical and can be evaluated to a single number. For example, $6\times\frac{1}{8}=\frac{6}{8}$ is a multiplication sentence. Multiplication sentences do not have unknowns.
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

Area Model



Tape Diagram



EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

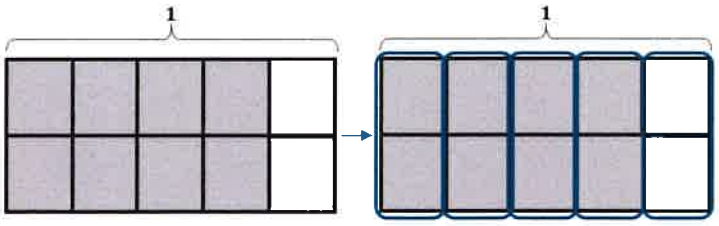
In Lessons 7 through 11, students explore **equivalent** fractions by using multiplication and division. To explain how fractions can be equivalent, students use **area models** and the **number line**.

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

- Express equivalent fractions in a **number sentence** by using multiplication (e.g., $\frac{1}{5} = \frac{1 \times 2}{5 \times 2} = \frac{2}{10}$).
- Express equivalent fractions in a number sentence by using division (e.g., $\frac{2}{10} = \frac{2 \div 2}{10 \div 2} = \frac{1}{5}$).
- Draw area models to represent number sentences and to prove fractions are equivalent.
- Draw number lines to show equivalence.

SAMPLE PROBLEM *(From Lesson 9)*

Compose the shaded fraction into larger **fractional units**. Express the equivalent fractions in a number sentence by using division.



$$\frac{8}{10} = \frac{8 \div 2}{10 \div 2} = \frac{4}{5}$$

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

- With your child, take turns drawing area models, such as the one above, and shading a fraction of each. After you have drawn and shaded each area model, work together to determine whether you can compose the fraction into larger units.
- Challenge your child to think about common **factors**. Write a fraction such as $\frac{4}{10}$. Ask your child to name the factors of 4 (1, 2, 4) and the factors of 10 (1, 2, 5, 10), and then ask him to name the common factors (1 and 2). Continue with other fractions.

TERMS

Compose: To change a smaller unit for an equivalent larger unit (e.g., convert fourths to halves: $\frac{2}{4}=\frac{1}{2}$).

Decompose: To break apart into smaller parts (e.g., partition a tape diagram equally into smaller parts to show equivalence).

Equivalent: Identifies the same amount. For example, $2\times\frac{1}{3}=\frac{2}{3}$ is equivalent to $\frac{1}{3}+\frac{1}{3}=\frac{2}{3}$.

Factor: A number that is multiplied by another number. For example, in $3 \times 4 = 12$, the numbers 3 and 4 are factors; therefore, 3 and 4 are factors of 12.

Fractional units: The result of dividing a unit into parts. For example, halves, thirds, and fourths are fractional units.

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.

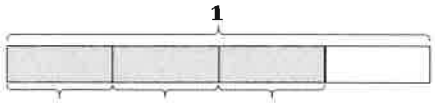
Unit fraction: A fraction with a numerator of 1. For example, $\frac{1}{2}, \frac{1}{3}$, and $\frac{1}{4}$ are all unit fractions.

MODELS

Area Model

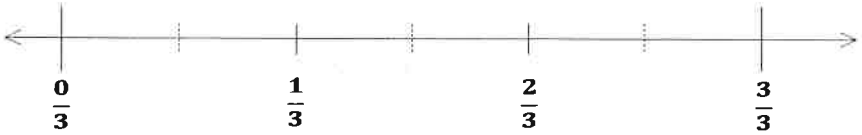
$\frac{1}{2}=\frac{6}{12}$

Tape Diagram



$\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$

Number Line



EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

In Lessons 12 through 15, students compare fractions by using different models (e.g., **number line, area model**) and strategies.

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

- Plot fractions on a number line and use the number line to compare fractions.
- Compare fractions by referring to **benchmarks**. (See Sample Problem.)
- Compare fractions by thinking about the size of the unit (e.g., thirds are larger than sixths, so $\frac{1}{3} > \frac{1}{6}$).
- Compare fractions with common and related **numerators** (e.g., fifths are larger than eighths; there are three of each unit, so $\frac{3}{5} > \frac{3}{8}$).
- Compare fractions with common and related **denominators** (e.g., $\frac{1}{3}$ is equivalent to $\frac{2}{6}$, so $\frac{1}{3} < \frac{3}{6}$).

SAMPLE PROBLEM *(From Lesson 12)*

Compare the fractions below by writing > or < on the line. Give a brief explanation for the answer, referring to one or more of the benchmarks 0, $\frac{1}{2}$, and 1.

$\frac{2}{3} \_\_\_ \frac{7}{8}$

$\frac{2}{3}$ *is one-third from* 1. $\frac{7}{8}$ *is one-eighth from* 1. *Thirds are larger than eighths, meaning that* $\frac{2}{3}$ *is farther from* 1 *than* $\frac{7}{8}$ *is from* 1, *so* $\frac{2}{3} < \frac{7}{8}$.

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 Fraction Number Battle game.

1. Remove the jacks, queens, kings, and jokers from a deck of cards. Let aces hold a value of 1. Decide how long you will play the game. Set a timer.
2. Divide the cards evenly between two players. Each player puts his cards facedown in a pile.
3. Each player picks two cards off the top of his pile, places them face up in the playing area, and arranges the cards as a fraction with the smaller number as the numerator.

HOW YOU CAN HELP AT HOME
(continued)

4. Each player calls out the value of his fraction. The player whose fraction has the greater value takes all of the cards played and places them at the bottom of his pile. If the fractions have an equal value, each player places three cards facedown in the playing area, followed by a new pair of cards face up, forming a new fraction with the cards. The player whose new fraction has the greater value gets all of the cards in the playing area.
5. Continue until one player wins by getting all of the cards. If time runs out first, the player with the most cards wins.

To LEARN MORE by viewing complete directions and other card game ideas, visit *eurmath.link/eureka-card-games.*

TERMS

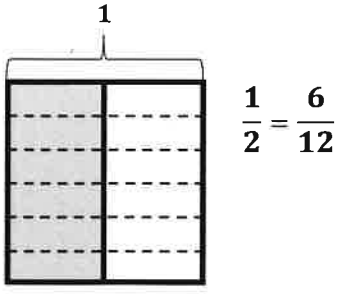
Benchmark: A reference point by which something is measured. The numbers 0, $\frac{1}{2}$, and 1 are benchmarks that can be used to help compare fractions. For example, $\frac{3}{8}$ is less than $\frac{1}{2}$, and $\frac{4}{6}$ is greater than $\frac{1}{2}$; therefore, $\frac{3}{8}$ is less than $\frac{4}{6}$.

Denominator: Denotes the fractional unit (the bottom number in a fraction). For example, *fifths* in three-fifths, as represented by the 5 in $\frac{3}{5}$, is the denominator.

Numerator: Denotes the count of fractional units (the top number in a fraction). For example, *three* in three-fifths, or 3 in $\frac{3}{5}$, is the numerator.

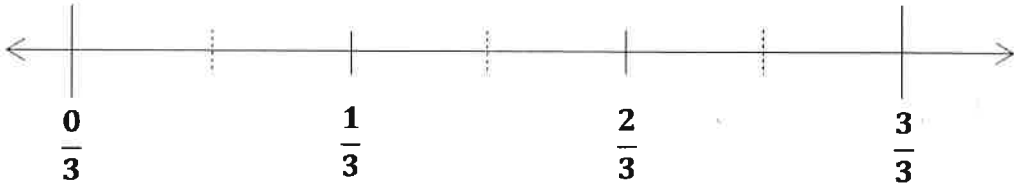
MODELS

Area Model



$\frac{1}{2} = \frac{6}{12}$

Number Line



EUREKA MATH™ TIPS FOR PARENTS

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.

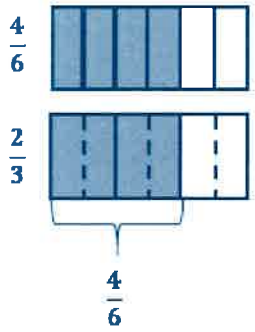
You can expect to see homework that asks your child to do the following:

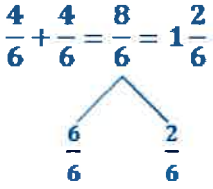
- Add and subtract fractions with like units (e.g., $\frac{3}{6}+\frac{2}{6}$) and unlike units (e.g., $\frac{2}{6}+\frac{1}{3}$).
- Record answers as **mixed numbers**, where applicable (e.g., $\frac{11}{8} = 1\frac{3}{8}$).
- Use the **RDW process** to solve word problems.

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.

$\frac{4}{6}+\frac{2}{3}$





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, $13\frac{42}{100}$.

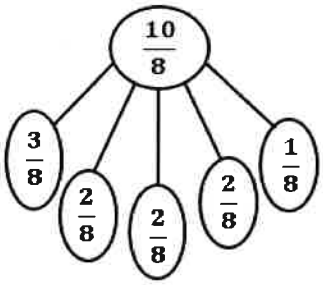
Number sentence: An equation for which both expressions are numerical and can be evaluated to a single number. For example, $\frac{1}{4}+\frac{1}{4}=\frac{2}{4}$ and $\frac{1}{10}+\frac{2}{10}+\frac{3}{10}=\frac{6}{10}$ are number sentences. Number sentences do not have unknowns.

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.

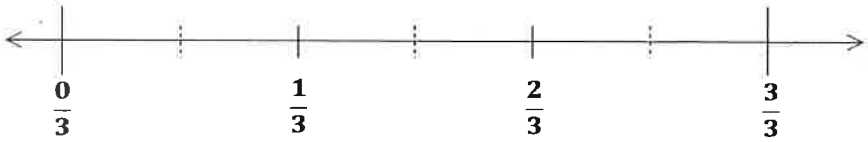
Unit form: A number expressed in terms of its units. For example, $\frac{15}{100}$ written in unit form is 1 tenth 5 hundredths or 15 hundredths.

MODELS

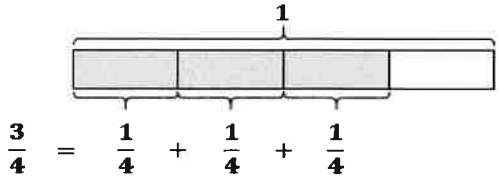
Number Bond



Number Line



Tape Diagram



EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

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

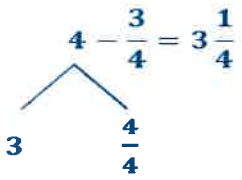
You can expect to see homework that asks your child to do the following:

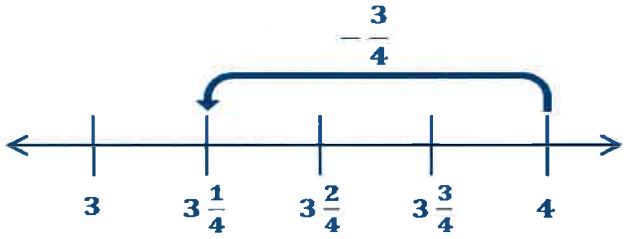
- Add fractions to whole numbers and subtract fractions from whole numbers.
- Use tape diagrams, number bonds, number lines, **benchmarks**, and area models to add, subtract, and compare fractions.
- Multiply whole numbers by **unit fractions**.
- Convert fractions greater than 1 to **mixed numbers**.
- 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**.

$4 - \frac{3}{4} =$ **$3\frac{1}{4}$**





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

- 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.

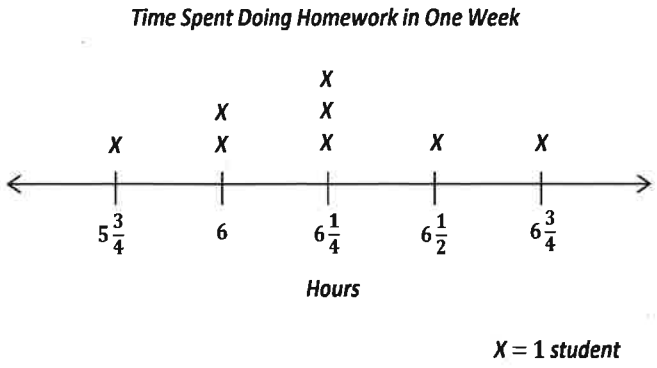
Mixed number: A number made up of a whole number and a fraction (e.g., $13\frac{42}{100}$).

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



KEY CONCEPT OVERVIEW

In Lessons 29 through 34, students add and subtract fractions and mixed numbers by using different strategies. (See Sample Problem.)

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

- Estimate the sum or difference of two mixed numbers (e.g., $2\frac{1}{12} + 1\frac{7}{8} \approx 4$).
- Add a mixed number and a fraction (e.g., $2\frac{1}{5} + \frac{4}{5}$).
- Add mixed numbers (e.g., $2\frac{2}{3} + 1\frac{2}{3}$).
- Subtract a fraction from a mixed number (e.g., $3\frac{4}{6} - \frac{5}{6}$).
- Subtract mixed numbers (e.g., $5\frac{3}{10} - 4\frac{7}{10}$).

SAMPLE PROBLEM *(From Lesson 34)*

Solve by using any strategy.
NOTE: The strategy used here to solve this problem, decompose the total, is just one possible strategy. Other strategies include the **arrow way** or using different number bonds/decomposition.

$7\frac{3}{8} - 4\frac{5}{8}$

$$7\frac{3}{8} - 4\frac{5}{8} = 2\frac{6}{8}$$

$$6 \quad \frac{11}{8}$$

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 the strategy she most prefers for adding and subtracting fractions. Ask her to explain why she thinks it's better than other strategies.
- Practice decomposing, or taking apart, a mixed number. Write a mixed number on a piece of paper. Prompt your child to take one from the total, rename it in fractional form, and then add it to the mixed number that remains (e.g., $5\frac{3}{5} = 4\frac{3}{5} + \frac{5}{5} = 4\frac{8}{5}$). Decompositions such as this help students with the strategy of decomposing the total before subtracting (e.g., $5\frac{3}{5} - \frac{4}{5} = 4\frac{8}{5} - \frac{4}{5} = 4\frac{4}{5}$).

MODELS

Arrow Way

$$4\frac{3}{8} - 3\frac{5}{8} = \frac{6}{8}$$

$$3\frac{5}{8} \xrightarrow{+\frac{3}{8}} 4 \xrightarrow{+\frac{3}{8}} 4\frac{3}{8}$$

EUREKA MATH™ TIPS FOR PARENTS

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., $\frac{1}{10}, \frac{2}{10}, \frac{3}{10}, \ldots, \frac{10}{10}$). 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.

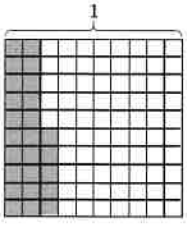
Expanded form: Representing a number as an addition expression or number sentence to show the value of each digit. For example, in fraction expanded form, $13\frac{42}{100} = (1\times10)+(3\times1)+\left(4\times\frac{1}{10}\right)+\left(2\times\frac{1}{100}\right)$, and in decimal expanded form, $13.42 = (1\times10)+(3\times1)+(4\times0.1)+(2\times0.01)$.

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

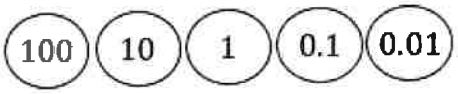
Mixed number: A number made up of a whole number and a fraction (e.g., $13\frac{42}{100}$).

MODELS

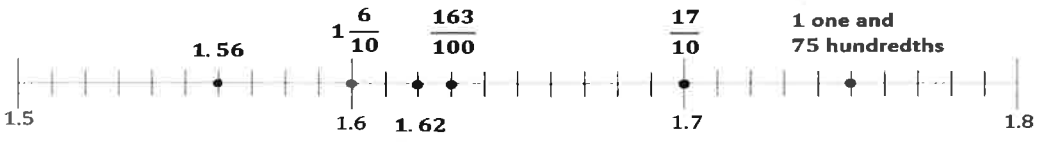
Area Model



Place Value Disks



Number Line



EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

In Lessons 4 through 8, students explore hundredths. They decompose tenths into hundredths and represent numbers in **decimal**, **fraction**, **expanded**, and **unit form**.

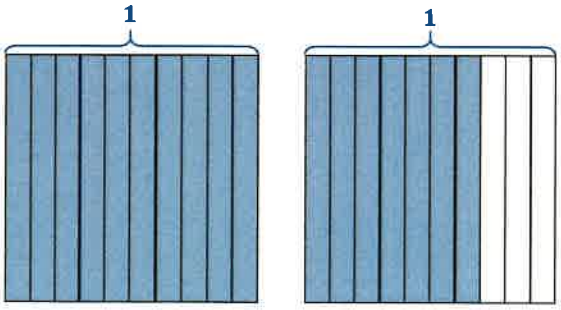
You can expect to see homework that asks your child to do the following:

- Express hundredths as the sum of tenths and hundredths and in decimal form (e.g., $\frac{56}{100} = \frac{5}{10} + \frac{6}{100} = 0.56$).
- Find equivalent fractions using multiplication and division (e.g., $\frac{3}{10} = \frac{3 \times 10}{10 \times 10} = \frac{30}{100}$).
- Shade area models to represent a mixed number and locate the number on a number line.
- Identify the value of the digits within a number and express numbers in various forms.
- Rename **decimal numbers** to represent them in other ways (e.g., $2.1 = 2\frac{1}{10} = \frac{21}{10} = \frac{210}{100}$).

SAMPLE PROBLEM *(From Lesson 8)*

Use the area model to represent $\frac{170}{100}$. Complete the number sentence.

$\frac{170}{100}$ = 17 tenths = 1 one 7 tenths = 1.7



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

- Prompt your child to look around the kitchen for five items such as boxes, cans, and bottles that have decimal numbers printed on them. Ask your child to say a decimal number and to identify the value of each digit. For example, if your child discovers a can with 21.35 written on it, she would say "twenty-one and thirty-five hundredths" and then state that the 2 has a value of 2 tens, the 1 has a value of 1 one, the 3 has a value of 3 tenths, and the 5 has a value of 5 hundredths.

TERMS

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

Decimal number: A number written using place value units that are powers of 10, such as hundreds, tens, ones, tenths, and hundredths. For example, 2.1 and 5.16 are decimal numbers, as are 245 and 31.

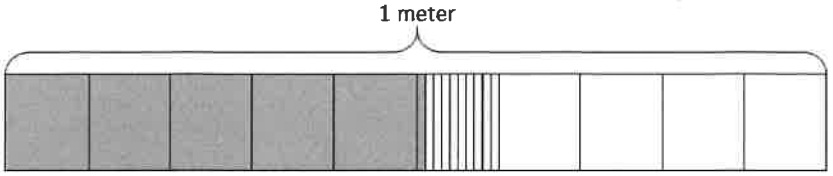
Expanded form: Representing a number as an addition expression or number sentence to show the value of each digit. For example, in fraction expanded form, $13\frac{42}{100} = (1\times10)+(3\times1)+\left(4\times\frac{1}{10}\right)+\left(2\times\frac{1}{100}\right)$, and in decimal expanded form, $13.42 = (1\times10)+(3\times1)+(4\times0.1)+(2\times0.01)$.

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

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

Tape Diagram/Meter Stick



EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

In Lessons 9 through 11, students compare **decimal numbers** by focusing on the value of the digits within the numbers.

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

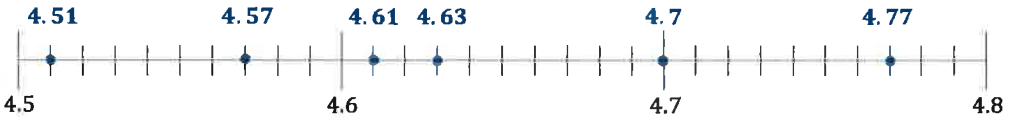
- Order and compare metric measurements of mass, volume, and length.
- Use the symbols <, >, and = to show the comparison of numbers written in **unit form**, **fraction form**, or **decimal form**.
- Shade area models to represent decimal numbers.
- Plot and label points on a **number line** to represent decimal numbers written in fraction form and decimal form.
- Order numbers from least to greatest or from greatest to least in decimal form.

SAMPLE PROBLEM *(From Lesson 11)*

Plot the following points on the number line using decimal form.

4.57, 4 ones and 77 hundredths, $4\frac{61}{100}, \frac{463}{100}, \frac{47}{10}, 4.51$

4.57 4.77 4.61 4.63 4.7 4.51



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

- Plot six points on a number line using fraction form and decimal form, as shown on the number line in the Models section. Incorrectly plot at least two of the numbers. For example, start the number line at 7.1 and end it at 7.4. Make tick marks to represent each hundredth. Plot the points 7.14, 7.21, $7\frac{33}{100}$, $7\frac{2}{10}$, 7.39, and $\frac{728}{100}$. Plot 7.14 incorrectly at 7.24 and 7.39 incorrectly at 7.3. Have your child identify and re-plot the incorrectly plotted points.
- Access a website that can be used to determine the distance from one place to another. Help your child find the distance from your home to five different points of interest near you, such as a gas station, restaurant, library, post office, and school. Have her record each distance, read it in decimal form, and then order the distances from least to greatest. If you do not have Internet access, consider making up distances.

TERMS

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

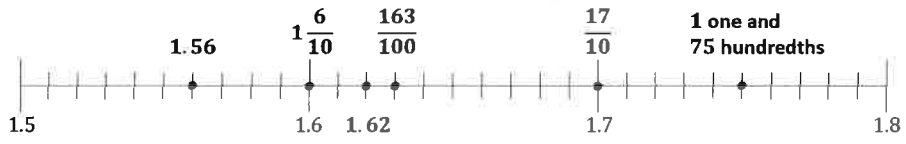
Decimal number: A number written using place value units that are powers of 10, such as hundreds, tens, ones, tenths, and hundredths. For example, 2.1 and 5.16 are decimal numbers, as are 245 and 31.

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

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.

MODEL

Number Line



KEY CONCEPT OVERVIEW

In Lessons 12 through 14, students add decimals by converting **decimal numbers** to **fraction form** before adding and then converting the sum back to a decimal number. (See Sample Problem.) It is important to note that, in these lessons, students do NOT learn to add decimals by lining up the decimal points.

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

- Express tenths and hundredths as hundredths (e.g., 3 tenths + 4 hundredths = 34 hundredths).
- Add tenths and hundredths by converting tenths to hundredths before finding the sum.
- Add **mixed numbers** with units of ones, tenths, and hundredths.
- Solve word problems requiring the addition of numbers written in **decimal form**, converting to fraction form before solving.

SAMPLE PROBLEM *(From Lesson 13)*

Solve by rewriting the expression in fraction form. After solving, rewrite the complete number sentence in decimal form.

5.9 + 4.94

$$5.9+4.94=5\frac{9}{10}+4\frac{94}{100}=5\frac{90}{100}+4\frac{94}{100}=9\frac{184}{100}=10\frac{84}{100}$$

$$1\ \frac{84}{100}$$

5.9 + 4.94 = 10.84

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

- Although it may be tempting to show your child how to add numbers in decimal form by lining up the decimals, it will be more helpful to support the current lesson of adding decimals by converting to fractions. The objective is for students to see that writing numbers in decimal form is just another way of expressing whole numbers, tenths, and hundredths that were written in fraction form (e.g., $\frac{86}{100} = 0.86$). In other words, the decimal and fraction forms share the same point on the number line. Students will be taught to add numbers in decimal form by lining up the decimals in Grade 5 of *Eureka Math*.
- Practice converting tenths to hundredths. Write a decimal number that has digits in both the ones place and the tenths place, such as 4.7. Prompt your child to write the number in fraction form ($4\frac{7}{10}$). Next, prompt him to write the number in fraction form as hundredths ($4\frac{70}{100}$).

  Watch for common errors such as saying that $4\frac{7}{10}$ is equivalent to $4\frac{7}{100}$ instead of $4\frac{70}{100}$.

TERMS

Addend: A number that is added to another number. For example, in 3 + 2 = 5, the numbers 3 and 2 are the addends.

Decimal form: A number written in the form of a decimal. For example, 23 hundredths in decimal form is 0.23.

Decimal number: A number written using place value units that are powers of 10, such as hundreds, tens, ones, tenths, and hundredths. For example, 2.1 and 5.16 are decimal numbers, as are 245 and 31.

Fraction form: A number written in the form of a fraction. For example, 23 hundredths in fraction form is $\frac{23}{100}$.

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

EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

In Lessons 15 and 16, students express the value of pennies, dimes, and quarters in **decimal form** and as fractional parts of a dollar. Students learn to write money amounts by using a decimal point and a dollar sign, and they determine money totals by expressing dollars and cents in **unit form**. (See Sample Problem.) It is important to note that, in these lessons, students do NOT learn to add money amounts by lining up the dollar signs and decimal points.

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

- Express the value of given numbers of pennies, dimes, and quarters in decimal form and in **fraction form**.
- Determine the total amount of money by using unit form (dollars and cents) and then express that total in fraction form and in decimal form.
- Use the **RDW process** to solve word problems involving money by adding like units (i.e., adding dollars to dollars and cents to cents).

SAMPLE PROBLEM *(From Lesson 15)*

Solve. Express the answer in decimal form.

3 dollars 4 dimes + 2 dollars 1 quarter 3 dimes

3 dollars 40 cents + 2 dollars 55 cents = 5 dollars 95 cents = $5.95

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

- Gather some quarters, dimes, and pennies. Ask your child to determine the value of different combinations of coins. Ask her to express the value as a decimal number and as a fraction of a dollar. Extend the activity by using dollar bills as well. (NOTE: Nickels are not used because they represent $\frac{1}{20}$ of a dollar. Twentieths are beyond the fourth-grade standard.)
- Ask your child to solve the following word problem by using a tape diagram and the RDW process: Sadie's lunch cost 5 dollars 27 cents, and William's lunch cost 6 dollars 14 cents. How much more did William's lunch cost than Sadie's? (87 cents) Keep in mind that, when computing with money, students use unit form. In this case, it is necessary for your child to rename 6 dollars 14 cents as 5 dollars 114 cents before he can subtract the 5 dollars 27 cents. Alternatively, he can rename each amount as cents, and then he can subtract by using the algorithm.

TERMS

Decimal form: A number written in the form of a decimal. For example, 7 hundredths in decimal form is 0.07.

Fraction form: A number written in the form of a fraction. For example, 7 hundredths in fraction form is $\frac{7}{100}$.

RDW process: A three-step process used in solving word problems that requires students to 1) read the problem for understanding, 2) draw a picture or model, and 3) write an equation and a statement of their answer.

Unit form: A number expressed in terms of its units. For example, in unit form, \$4.85 is 4 dollars 85 cents.

EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

In Lessons 1 through 5, students convert from one unit of measure to another by using **conversion tables**, and they solve word problems that require converting from a larger unit (or a larger **mixed unit**) to a smaller unit (e.g., feet to inches, pounds and ounces to ounces, gallons to cups).

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

- Convert units of length, weight, capacity, and time to smaller units of length, weight, capacity, and time.
- Use the **RDW process** to solve word problems.
- Create word problems based on a given **tape diagram**.

SAMPLE PROBLEM *(From Lesson 5)*

Mary's goal was to finish running a marathon in 4 hours. She completed the marathon in 228 minutes. By how many minutes did Mary beat her goal?

1 hour = 60 minutes
4 hours = 4 × 60 minutes = 240 minutes
240 – 228 = 12

Mary beat her goal by 12 minutes.

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

- Find packages, cartons, cans, or boxes in your kitchen whose labels show weights or capacities. With your child, convert the measurements to smaller units. For example, your milk container might have a capacity of 2 quarts. Convert to find out how many cups that is. (2 quarts = 8 cups) Find real-world situations throughout the day that will help your child think about conversions. For example, ask her whether she would have enough milk for a soup recipe requiring 9 cups if she had a 2-quart container full of milk. (No; 2 quarts is only 8 cups.)
- Challenge your child to convert units of length, weight, capacity, and time. For example, ask him to convert 3 yards 1 foot to inches. (120 inches) After he completes each conversion, allow him to check his work online (e.g., search for "How many inches are equal to 3 yards 1 foot?").

TERMS

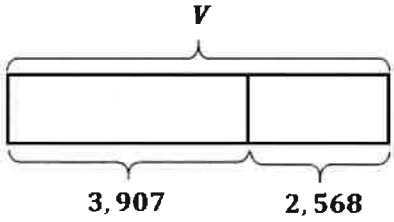
Mixed unit: Expressing a number in terms of more than one unit (e.g., 2 gallons 3 quarts, 2 meters 34 centimeters).
RDW process: A three-step process used in solving word problems that requires students to 1) read the problem for understanding, 2) draw a picture or model, and 3) write an equation and a statement of their answer.

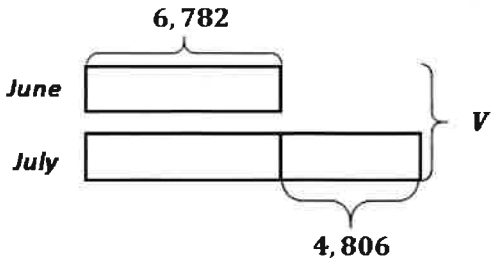
MODELS

Conversion Table

Measurement Conversions	
1 kilometer	1,000 meters
1 meter	100 centimeters
1 yard	3 feet
1 foot	12 inches
1 pound	16 ounces
1 kilogram	1,000 grams
1 liter	1,000 milliliters
1 gallon	4 quarts
1 quart	2 pints
1 pint	2 cups
1 minute	60 seconds
1 hour	60 minutes
1 day	24 hours
1 week	7 days

Tape Diagrams





EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

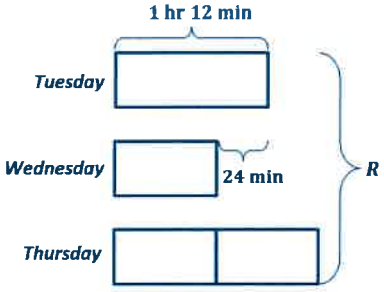
In Lessons 6 through 11, students solve problems involving mixed units of capacity, length, weight, and time.

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

- Add and subtract mixed measurement units. (See Sample Problem.)
- Use the **RDW process** to solve multi-step measurement word problems.

SAMPLE PROBLEM *(From Lesson 10)*

Jennifer ran for 1 hour 12 minutes on Tuesday. On Wednesday, she ran 24 minutes less than she did on Tuesday. On Thursday, she ran twice as many minutes as she did on Wednesday. How much time did Jennifer spend running during that three-day period?



***Tuesday*: 1 hr 12 min = 60 min + 12 min = 72 min**
***Wednesday*: 72 min – 24 min = 48 min**
***Thursday*: 48 min + 48 min = 96 min**

***R* = 72 min + 48 min + 96 min = 216 min = 3 hr 36 min**

180 min = 3 hr; 36 min

Jennifer spent 3 hours 36 minutes running during the three-day period.

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

- When you find yourself working with units of measure during the day, ask your child questions about your activities. For example, you might say, "The directions on the box say to bake this bread for 1 hour 10 minutes. I want to check the bread 15 minutes before the time is up to make sure that it doesn't burn. For how many minutes should I set the timer?" (55 minutes)
- Find a tape measure that a carpenter might use and show it to your child. Pull out the tape and ask him to examine the measurements. Are they metric units (i.e., centimeters) or standard units (i.e., inches)? How can you tell? Next, ask your child to use the tape measure to prove the equivalence of measurements. For example, you might ask him to prove that 1 foot 3 inches is equivalent to 15 inches.

TERMS

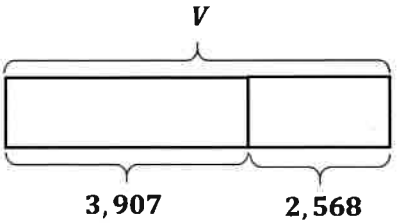
RDW process: A three-step process used in solving word problems that requires students to 1) read the problem for understanding, 2) draw a picture or model, and 3) write an equation and a statement of their answer.

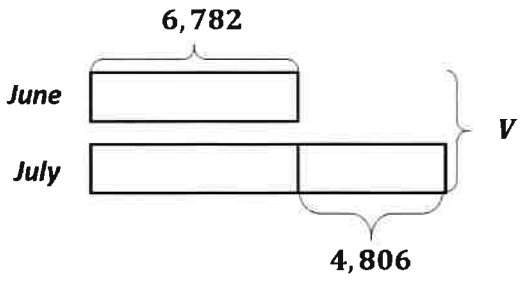
MODELS

Conversion Table

Measurement Conversions	
1 kilometer	1,000 meters
1 meter	100 centimeters
1 yard	3 feet
1 foot	12 inches
1 pound	16 ounces
1 kilogram	1,000 grams
1 liter	1,000 milliliters
1 gallon	4 quarts
1 quart	2 pints
1 pint	2 cups
1 minute	60 seconds
1 hour	60 minutes
1 day	24 hours
1 week	7 days

Tape Diagrams





KEY CONCEPT OVERVIEW

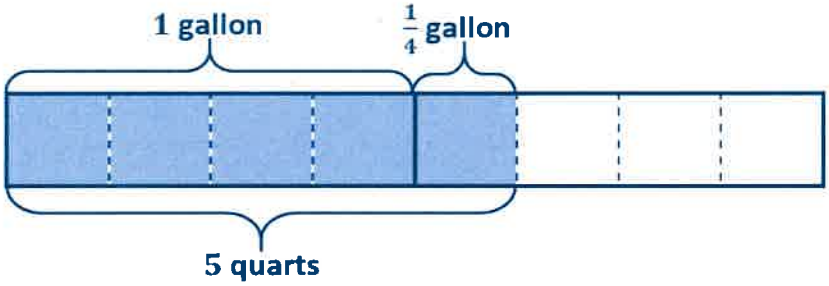
In Lessons 12 through 14, students continue to work with conversions. They convert larger mixed measurement units with fractional parts to smaller units.

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

- Draw a tape diagram to show equivalence from one unit of measure to a smaller unit of measure.
- Convert from a larger unit to a smaller unit.
- Use the RDW process to solve multi-step measurement word problems.

SAMPLE PROBLEM *(From Lesson 12)*

Draw a tape diagram to show that $1\frac{1}{4}$ gallons = 5 quarts.



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

- With your child, use index cards or small pieces of paper to make 8 pairs of cards that show equivalent measurements. For example, on one card, write $3\frac{1}{4}$ pounds; on another card, write 52 ounces. Use measures of length, weight, capacity, and time. Reference the **conversion table** in the Models section for examples of units. After you have made the cards, play a memory game with your child.
    1. Place the cards facedown in rows to form a grid.
    2. Player A flips over two cards, keeping the cards in their place. If the cards are a match, Player A keeps them and takes another turn. If the cards are not a match, Player A flips them back over, and Player B takes a turn.
    3. Play continues until all of the matches have been made. The person with the most matches wins.
- Take turns with your child naming measurements. With each turn, have the other person convert the given measurement to smaller units. For example, you say, "$1\frac{1}{2}$ hours," and your child says, "90 minutes."

MODELS

Conversion Table

Measurement Conversions	
1 kilometer	1,000 meters
1 meter	100 centimeters
1 yard	3 feet
1 foot	12 inches
1 pound	16 ounces
1 kilogram	1,000 grams
1 liter	1,000 milliliters
1 gallon	4 quarts
1 quart	2 pints
1 pint	2 cups
1 minute	60 seconds
1 hour	60 minutes
1 day	24 hours
1 week	7 days

EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

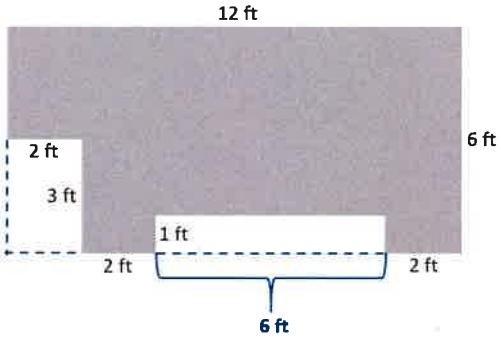
In Lessons 15 through 18, students review math concepts that they have learned throughout the year. They also create a summer folder.

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

- Find the **area** of a shaded figure. (See Sample Problem.)
- Use a ruler and **protractor** to create a figure, shade part of the figure, and then find the area of the unshaded part.
- Plot and label points on a **number line**.
- Convert numbers written in decimal form to **mixed numbers**, tenths, and hundredths.

SAMPLE PROBLEM *(From Lesson 15)*

Find the area of the shaded figure.



Area of large rectangle: **6 ft × 12 ft = 72 square ft**

Length of bottom center unshaded rectangle:
12 ft – 2 ft – 2 ft – 2 ft = 6 ft

Area of unshaded rectangles:
1 ft × 6 ft = 6 square ft
2 ft × 3 ft = 6 square ft

Area of large rectangle – area of unshaded rectangles:
72 square ft – 6 square ft – 6 square ft = 60 square ft

The area of the shaded figure is 60 square feet.

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

- Your child will soon bring home a summer folder. It will include the Homework pages from Lessons 15 through 17, fluency activity cards from Lesson 17, and vocabulary game ideas from Lesson 18. Each activity in the packet was carefully crafted to provide your child with opportunities to practice math throughout the summer. Set aside some math time each day and complete the activities together. Challenge your child to math contests. Celebrate what he knows and what he has learned this year. Congratulate him on his hard work and perseverance.
- Continue to practice basic facts for addition, subtraction, multiplication, and division. The goal is for your child to remain fluent with the basic facts.

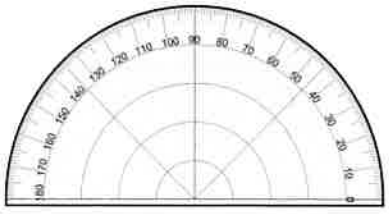
TERMS

Area: The amount of space inside a two-dimensional shape. For example, in rectangles, Area = length × width.

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

MODELS

180° Protractor



Number Line