

beauty & truth
MATH

Mathematics in a
Charlotte Mason Education

ARITHMETIC

SAMPLE

YEAR 4 BUNDLE

SAMPLE

Beauty & Truth Math

- Mathematics in a Charlotte Mason Education -

ARITHMETIC YEAR 4 • BUNDLE

Used in conjunction with

STRAYER-UPTON PRACTICAL ARITHMETICS, SECOND BOOK

by George Drayton Strayer and Clifford Brewster Upton

ARITHMETIC • YEAR 4 • BUNDLE

Copyright ©2025 by Beauty & Truth Math. All rights reserved.

This document is for personal home schoolroom use only. Permission must be granted by the author for any other usage. Its content cannot be copied, reproduced, repackaged, altered, modified, or publicly displayed except for personal, noncommercial use. This file may be printed by an online service for immediate family use only.

You may post pictures of your family using this product on social media and blogs as long as Beauty & Truth Math is properly attributed.

No Redistribution: This product may not be reproduced, repackaged, or redistributed, in whole or in part, for any reason.

Modification of Terms: Beauty & Truth Math reserves the right to modify the terms of usage at any time. Any modification shall be effective immediately and shall replace all prior terms of usage.

beautyandtruthmath.com

“Never are the operations of Reason more perfect and more delightful than in mathematics. Here, men do not begin to reason with a notion that causes them to lean to this side or to that. By degrees, absolute truth unfolds itself. We are so made that truth, absolute and certain truth, is a perfect joy to us; and that is the joy that mathematics affords.”

(Charlotte Mason, Vol. 4, pp. 62-63)

“How sad that this subject, ethereal as faery and powerful beyond telling, should find no other adjective than ‘useful’ to justify us in imparting it to our children. Number to the philosophers of old was a touchstone of learning; it was worthy of their greatest respect and deepest thought. Let us take this gift with the others they have given us; this thought of Number as worthy of our best, aesthetically satisfying as an art, beckoning onward as a science, and luring us ever forward towards increasingly enchanting prospects ahead.”

(Stephens, Number. A Figure and a Step Onward, p. 4)

“And if our boys and girls can be brought to feel that arithmetic is a game—a noble game—one of the noblest though not one of the most spectacular that the human race has played—and that it is an honour and a privilege to play at it; and if we can keep that feeling alive by the right exercise and the apt stimulus, cunningly applied with a smile and a jest, as becomes so noble a game, the arithmetic lesson will cease to be a dismal grind and become a grand pursuit full of glamour and excitement.”

(Ballard, Teaching the Essentials of Arithmetic, p. 34)

SAMPLE

WELCOME

Thank you for purchasing this full-year guide! We are humbled and honored by your support. Please read through this introduction carefully. Understanding our approach is vital to maximizing the benefits of each guide.

THE VISION

Beauty & Truth Math exists to assist students AND teachers in the realm of mathematics in a Charlotte Mason education. Reading the scripted lessons and checking your students' answers is possible. However, this keeps the teacher from being an engaged and involved partner in the learning process.

These lessons are designed with the assumption that the teacher will work *with* the students, ask questions, facilitate discussions, and monitor their progress. Each lesson is an opportunity for building relationships between you, your students, and the Lord. Please make the most of this time together, walking alongside your students as they explore and understand mathematical ideas.

We thoroughly believe that math done completely in isolation misses opportunities to make deep connections. Just like a foreign language needs to be communicated and spoken to make connections, math is its own language with its own big ideas. Discussing these ideas is the best way for students to learn these living ideas.

We aim to provide a *living* education as we work with living, born persons. *Living* involves changes and adaptations. These lessons are guides and servants, not masters you must follow. Please use the Spirit's wisdom when discerning what you should modify, skip altogether, push forward on, or slow down on as you and your students are on this journey.

MAKING FORWARD PROGRESS

The Beauty and Truth Math curriculum is a blend of spiral and mastery learning. The weekly review enables students to continue working on challenging ideas without hitting a plateau. We also teach the reasonableness of each math concept and then recap it each year to help build conceptual understanding.

We never want students to get bogged down in an idea they have not fully mastered. **Please continue moving forward**, even if memorization has not yet occurred. Your student's relationships with the Lord, you, and math are more important than memorizing a formula!

CONTACTING US

We welcome feedback and questions! For general inquiries, please email us at contact@beautyandtruthmath.com.

For questions about this guide's content, please email Emily Al-Khatib at emily@beautyandtruthmath.com.

COPYRIGHT

These guides have been a labor of love. Please respect our hard work and do not share any content and links that are not publicly available on our site.

CORRECTIONS

We have done our best to remove all typos from these guides. If you find any mistakes, please forgive us and let us know *after* checking the [Corrections](#) document in the Important Teacher Helps folder.



WEBSITE LINKS DISCLAIMER

PLEASE PREVIEW LINKS BEFORE USING! While we have done our best to ensure that all sites we link to are appropriate, we do not have control over their content or changes.

We are grateful for the free resources offered by other sites and want to support them whenever possible. We link directly to their pages as they generate revenue through traffic on their sites.

In many cases, the linked pages will provide multiple worksheet options. Most of the time, we will specify which worksheet you will need in the guide. Sometimes, you must choose the worksheet that the guide will also say.

Ensuring the content is age-appropriate for lessons is the teacher's final responsibility. Please email us at contact@beautyandtruthmath.com to report broken links.

READY, SET, GO!

"Putting in the work up front to make the school days run easy."

We have created three folders in this guide to make it easy to access the teacher help documents and printables. Their unique QR codes and links are included in multiple places in this introduction and are shown here for easy identification.

We will walk you through using these linked folders in the following few pages, so please don't worry about viewing them now. This page is simply an introduction to them.

Important Teacher Helps – This folder contains helpful resources to assist and support you as you implement math in a Charlotte Mason education. It includes the following documents:

- A CHARLOTTE MASON MATH EDUCATION outlines a vision for a Charlotte Mason math education.
- THE ARITHMETIC PROGRESSION provides an overview of arithmetic in the Beauty & Truth Math Guides using Charlotte Mason's philosophy. Sources include PR articles & books recommended in the PUS Programmes.
- ALL ABOUT THE GUIDES is everything you need to know about the guide's setup.
- FORMS 1&2 REVIEW ACTIVITIES is a treasure trove of various review activities organized by topic. Use these to keep review time lively and engaging.
- SUPPORT VIDEOS LIST is a compiled, linked list of support videos in this guide.
- ARITHMETIC, YEAR 4 CORRECTIONS is an ongoing list of guide corrections, beginning with the 2023 edition.
- ADDITIONAL SUPPLEMENTAL RESOURCES provide extra teacher support.



Cardstock Printables – This folder contains all resources that require printing on cardstock, as the student will use these documents frequently.



Printables – This folder contains all of the consumable printables for your student.



GET READY!

- **SEE** the **Materials Needed** section in this guide to determine what materials you have and still need to purchase.
- **BUY** Strayer-Upton, Book 2 in physical and/or digital form. **Our Favorites** page links to the Strayer-Upton Book Series and other recommendations we have compiled to help you prepare and organize your materials. 
- **PRINT** the FORMS 1&2 REVIEW ACTIVITIES document in the **Important Teacher Helps** folder.
 - We recommend printing it on colored paper to make it easy to find. *You only need to print this document once for all your Form 1&2 students.*
- **PRINT ALL OF THE DOCUMENTS** in the **Cardstock Printables** folder. We recommend using cardstock, as the student will be using these documents frequently. Sometimes, these will include cut-apart cards. 
- **PRINT ALL OF THE DOCUMENTS** in the **Printables** folder. 
- **DECIDE** if you will print the guide or use it on a screen.

GET SET!

READ THROUGH THE FOLLOWING IMPORTANT TEACHER HELPS:

1. A CHARLOTTE MASON MATH EDUCATION
2. THE ARITHMETIC PROGRESSION
3. ALL ABOUT THE GUIDES



Learn how to implement the guides in daily life. Read through the Putting It Altogether section of this guide.

Prepare your materials. There is no one right way to do this! The following list is simply a compilation of ideas Beauty & Truth Math users have found helpful.

- **Create a student math notebook for each student.**
 - Fill it with both graph and unlined, blank paper. We generally recommend $\frac{1}{2}$ " squares, though some students may need larger squares depending on their writing ability.
 - Create sections in the notebook for daily assignments and reference pages. Decide with your student how to organize the notebook. If applicable, create different sections for each stream of math.
 - Determine whether you will have your student write headings for each assignment; including information, such as the date and page number, is a great idea. Writing the problem number and showing the final answer, either with a box or a circle around it, is also strongly encouraged.
- **Put together a teacher math notebook for yourself.**
 - Create sections for your calendar, lessons from the guides, printable and supplementary resources, exams, notes, and other relevant materials.
- **Find a place for the Cardstock Printables.**
 - Store these in a folder or pocket of your teacher's notebook or inside an accordion file folder. The goal is to keep them accessible and in good condition, as you will use them frequently.
- **Use tabs to label and easily find what you need!**
 - Tab each topic in the FORMS 1&2 REVIEW ACTIVITIES document (from the Important Teacher Helps folder).
 - In the Strayer-Upton books, tab the following:
 - Your place for the current lesson, and the corresponding answer key section in the back
 - Review & mental math pages
- **Have individual containers for each of your student's supplies.** We recommend storing card sets in plastic bags inside an index card holder or binder pouch.

GO!

Any author of math textbooks or guides will tell you that we write to accommodate as many students as possible and provide more than is needed. You have complete freedom to modify the lessons and adjust the number of problems assigned to meet your students' needs.

First, take the Beauty & Truth Math Guide Vow – I do solemnly promise that I will remember and implement the following statements:

- I have permission from Charlotte Mason and the authors of these lessons to adjust or modify any lesson, at any time, to provide a living education to my unique, born persons.
- I have permission from Charlotte Mason and the authors of these lessons to assign fewer problems than what is written in the lessons, providing a living education tailored to my unique, born persons.
- I have permission from Charlotte Mason and the authors of these lessons to assign additional problems beyond those written in the lessons, providing a living education tailored to my unique, born students.

“...the educator has to deal with a self-acting, self-developing being, and his business is to guide, and assist in, the production of the latent good in that being, the dissipation of the latent evil, the preparation of the child to take his place in the world at his best, with every capacity for good that is in him developed into a power.” (Mason, Vol. 1, p. 9)

Then, review the Week Resource page each week and complete the following.

1. Read the Overview so you know what you will be doing next.
2. Complete any Teacher Prep listed.
3. Ensure you have all the Special Materials Needed.
4. Choose an assignment from the Suggested Review to use with your students. These assignments build depth in highlighting and understanding different number relationships. When choosing what to review, consider three things:
 - What areas do my students require more practice to solidify concepts?
 - What topics have we not reviewed in a while?
 - What assignments would give my students a reprieve and an easier lesson to build their confidence and enjoyment of math?
5. Finally, choose mental math problems to use throughout the week.

Now, pray for joy and wisdom as you explore mathematical truths with your students daily. Then dive right into using the lessons, confident that the Lord is with you and for you!

ALL ABOUT THE YEAR

SEEING THE BIG PICTURE

There is no one-size-fits-all way to teach math using the Charlotte Mason method. Our guides are one option for teachers to use. We have created them to be adaptable to each unique student, both in the big picture and in the guides' details.

We have designed our curriculum to imitate the math streams used in Charlotte Mason's schools. Students have several options for the tracks and combinations of these streams. For more information, see our [Scope & Sequence](#) page on our website.



Our [Guides' Big Ideas](#) page shows the main ideas throughout the years.



YEAR OVERVIEW

In Year 4, the focus is on fractions. Students learn how to add, subtract, multiply, and divide fractions. At the heart of all of these is the idea of equivalent fractions. We spend extensive time looking at fraction families and how they are connected.

Many other ideas, such as factors, multiples, long division, measurements, decimals, perimeter, and surface area, are also covered. Year 4 is significant in students' math adventures. We introduce foundational ideas, extend the lesson to 30 minutes, and require more materials than in most years. Everything works together to provide students with a strong foundation for upper-level math.

We want students to get in the habit of clearly labeling their work. In Year 4, we recommend having students include the date and page number for all assignments. While working, we want the students to develop the habit of writing each problem number and marking each answer by putting a circle or box around it.

The **maximum** lesson time for students in Arithmetic, Year 4, is 30 minutes.

EVERYDAY & SPECIAL MATERIALS

We assume students will always have their pencil, math notebook with grid paper, grid dry-erase board, and dry-erase marker handy for lesson time. The "Special Materials Needed" sections list any additional materials beyond these items.

CARDSTOCK PRINTABLES VS. PRINTABLES

The teacher must prepare all cardstock printables before the term begins. The special materials sections will list the cardstock printables without links. Meanwhile, printable links are in the “Special Materials Needed” section of the Weekly Resources page.

INDEPENDENT STUDENT WORK

The Printables folder includes Independent Student Work. This document contains all the Student Response sections that can be completed without the teacher’s help, excluding the answers. We recommend printing it for the student to use at the beginning of the year.



MONEY

In Year 4, money is often used to represent place value. As such, play money is provided for all the dollar bills in the Cut-Apart Cards document. We highly recommend using real coins whenever possible.



THINGS TO LOOK FORWARD TO THIS YEAR

This list highlights the special features and noteworthy things throughout the year. Each term introduction will expound on these ideas.

- All About Pages
- Equivalent Fractions Page
- Independent Student Work
- Math Jeopardy
- Math Vocabulary Page
- Multiplication Guidelines
- Ongoing Reference Pages
- Sieve of Eratosthenes
- The Details Matter

MATERIALS NEEDED FOR THE ENTIRE YEAR

Our Favorites links to the Strayer-Upton Book Series and other recommendations to help you prepare and organize your materials.



Textbook

Strayer-Upton, Book 2

Everyday Materials

- Dry-Erase Marker
- Grid Dry-Erase Board
- Notebook (with $\frac{1}{2}$ " grid paper)
- Pencil

Cardstock Printables

- AR.Y4.Bundle Cut-Apart Cards
- AR.Y4.Bundle Reference Pages



Printables

- AR.Y4.Bundle Independent Student Work (optional)
- AR.Y4.Bundle Printables
- AR.Y4.Bundle Printable Answer Keys



SPECIAL MATERIALS

- 1-Inch Blocks (30)
- Apples (3)
- Area & Perimeter Worksheet (Choose one.)
- Bathroom Scale (that can weigh kilograms, if available)
- Beads (16 blue, 8 white)
- Books (12)
- Calendar
- Candy or Granola Bar (divided into six sections)
- Clock
- Colored Paper (5, same size, different colors)
- Colored Pencils



- Dice (4)
- Dry Measuring Containers (pint, quart, peck, bushel, only if needed)
- Factors & Multiples Worksheet
- Factors and Multiples Riddles 2
- Food Items (20 water bottles, 12 cans of food [If needed, you could use different objects, like beads, to represent water bottles and cans of food.])
- Gift Box (small, rectangular box)



- Decimal Sequences
- Gummy Bear
- Highlighter
- Index Cards
- Internet Access
- Items to Weigh (heavy and light)
- Jar (filled with gumballs or any type of small toy or candy that usually costs a quarter)
- Kitchen Scale (that can weigh grams)
- Knife
- Large Dry-Erase Board or Space on the Floor or Wall (to mark off a square foot and square yard)
- Lego Blocks (20+, various colors, same size)
- Liquid Measuring Containers (milliliter, liter, quart, pint, gallon)
- Liquid Measuring Containers (ounce, cup, only if needed)
- Lunch Food (sandwiches, fruit, etc.)
- Markers
- Masking or Painter's Tape (if using space on the floor or wall)
- Measuring Cup
- Measuring Tape
- Mental Math Worksheets (Print all 10 worksheets.)
- Meter Stick (homemade option)
- Metric Measurements Word Problems



- Globe or Map (showing various time zones)
- Glue
- Money (60 pennies, 40 dimes, 10 quarters, 1 half-dollar [if available])
- Multiplying Fractions Worksheet (Choose one.)
- Paper Plates (2)
- Pencil (new, unsharpened)
- Perimeter Worksheet (Choose one.)
- Permanent Marker
- Playing Cards
- Pool Noodles (2, different colors)
- Poster Board or Large Paper
- Ream of Printer Paper (if available)
- Ruler
- Scissors
- Small Ingredient (i.e., beans, rice)
- Sticky Tabs (four different colors)
- Stopwatch
- Straightedge (ruler, yardstick, etc.)
- String or Ribbon (long enough to go around the gift box in both directions)
- Sugar Cubes (30)
- Surface Area Worksheet
- Tape
- Two-Color Counters (50)
- Unlined Paper
- Water
- Wrapping Paper
- Yardstick (homemade option)



beauty & truth
MATH

Mathematics in a
Charlotte Mason Education

ARITHMETIC

SAMPLE

YEAR 4 • TERM 1

• WEEK 4 RESOURCES •

ARITHMETIC. YEAR 4. TERM 1. WEEK 4

OVERVIEW

This week, we will focus on investigating fractions more, looking at fractions as a way to notate division, writing simple remainders as fractions, and distinguishing between proper and improper fractions.

BIG IDEAS NEEDED BEFORE BEGINNING

- Fractions as Part of One Whole
- Fractions as Part of a Group

SUGGESTED PACE

Day 1: Fractions as Division

Day 2: Ways to Express Division

Day 3: Writing a Remainder as a Fraction

Day 4: Proper and Improper Fractions

Day 5: Review/Catch-Up

ONGOING REFERENCE PAGES

- Math Vocabulary Page
- All About Fractions
- Dry Measures Table (p. 187)

MENTAL MATH IDEAS

- 21

SPECIAL MATERIALS NEEDED

- All About Fractions & Decimals
- Apples (2)
- Knife
- Math Vocabulary Page
- Money (dimes, \$1 bills)
- Ruler
- Two-Color Counters

SUGGESTED REVIEW

- Fractions (AR.Y4.T1.W3): 62, 63, 64
- Division (AR.Y3.T3.W4): 31 Review vocabulary and how to check a division problem.
- Problem-Solving: 12

• Fractions as Division •

AR. Y4. T1. W4. L1

STREAM

Arithmetic



RESOURCES USED

Strayer-Upton, Book 2 (p. 65)

OBJECTIVES

Students will be able to express fractions as division.

SPECIAL MATERIALS NEEDED

Apples (2), Knife, All About Fractions & Decimals

THE PLAN

1. Tell what you know of a fraction. *Draw out the idea of parts of a whole or part of an entire group of things.* What is a numerator? (The numerator is the fraction's top number, representing the number of parts taken.) Denominator? (The denominator is the fraction's bottom number, representing the total number of parts.) Can you look around the room and see something in halves? Thirds? Fourths?
2. Let's think more about fractions today. You have two apples and want to share them among three friends.
 - a. How would you do that so each friend would have the same amount? What part of the apple would each get? ($\frac{2}{3}$) Allow the student time to think. If help is needed, you could ask, "How would you share one apple among three friends?" After the student cuts the apple into thirds, ask, "What could you do with the second apple?" Again, the student would cut the second apple into thirds. Then, ask, "How could we share these pieces equally?"
3. While covering up the explanation, read and answer the top example problem on p. 65. If needed, allow the student to complete this activity to ensure understanding with manipulatives. Instead of apples, you could use pieces of paper, i.e., dividing three pieces among four friends. What part of the paper would each get? ($\frac{3}{4}$)
4. So what mathematical operation (addition, subtraction, multiplication, division) does a fraction represent? (A fraction represents division.)
5. Draw the division sign on your dry-erase board. ($\div$)
 - a. Does this remind you of a fraction in any way?
 - b. What would happen to the two dots if you changed this to a fraction? (The dots go away, and those spaces are where the numbers go - the numerator and the denominator.)

6. Go back to the two example problems. How would you write the answers to each of those? ($\frac{2}{3}$, $\frac{3}{4}$)
7. Complete p. 65: 1-5 out loud.
8. What if you have ten apples and want to share those with just yourself?
 - a. How many would you get? (10 apples)
 - b. How could you write that in fraction form? ($\frac{10}{1}$)
 - c. How much of a stomach ache would you have? 😊🚑
9. Read p. 65: 6. What is any number divided by itself? (1)
10. Complete p. 65: 7, 10, 13, and 16 out loud.

STUDENT RESPONSE

1. In your math notebook, complete p. 65: 8, 9, 12, 15, and 18.
2. Add to the All About Fractions page.

SAMPLE

• Ways to Express Division •

AR. Y4. T1. W4. L2

STREAM

Arithmetic



RESOURCES USED

Strayer-Upton, Book 2 (p. 66, top section)

OBJECTIVES

Students will be able to express division in four different ways.

SPECIAL MATERIALS NEEDED

Two-Color Counters, Math Vocabulary Page

SPECIAL NOTE

This lesson does not have a moving van symbol.

THE PLAN

1. We talked about fractions and division in the last lesson. Tell me about that. *Draw out the idea of a fraction is a way to write a division problem.*
2. To review, can you show the following using counters? Try to use a different number of counters for each answer.
 - a. A group of counters where $\frac{1}{2}$ of the counters are red. (An example answer is six counters in all. Three are red, and three are yellow.)
 - b. A group of counters where $\frac{3}{4}$ of the counters are red. (An example answer is four counters total. Three are red, and one is yellow.)
 - c. A group of counters where $\frac{2}{2}$ of the counters are red. (All counters are red.)
 - d. A group of counters where $\frac{0}{4}$ of the counters are red. (No counters are red.)
3. Let's say that you need to divide 42 by 3. We can write this in several different ways. Which ones do you know? ($42 \div 3$, $3 \overline{)42}$, $\frac{1}{3}$ of 42, and $\frac{42}{3}$) *Allow the student time to think. Ask questions to help guide the student's thinking if assistance is needed.*
4. Complete p. 66: 1-9 (top section) out loud.
5. Now, imagine you had three oranges shared equally among three friends.
 - a. How many would each friend get? (1 orange)
 - b. Can you write that as a fraction? ($\frac{3}{3}$)
 - c. Read p. 66: 10 (top section). What do you think? (Yes, Ruth is correct.)

STUDENT RESPONSE

1. In your math notebook, complete the following.
 - a. Choose one problem from p. 66 1-9 (top section) to write all four ways of expressing division.
 - b. Complete p. 66: 11 (top section) out loud. Choose one to write in your math notebook.
2. On your Math Vocabulary Page, add the word **fraction**. Be sure to include as much as possible about the word and an illustration. Leave some extra space underneath the word, as you may want to change it or add to it as you learn more.

SAMPLE

• Writing a Remainder as a Fraction •

AR. Y4. T1. W4. L3

STREAM

Arithmetic



RESOURCES USED

Strayer-Upton, Book 2 (p. 66, bottom)

OBJECTIVES

Students will be able to write the remainder of a division problem as a fraction.

SPECIAL MATERIALS NEEDED

None

THE PLAN

1. What division symbols or ways can we write division do you remember from our last lesson? ($\div$, $\overline{)}$, a unit fraction of the total, a fraction) Which way do you like best?
2. Imagine sharing nine cookies equally among four friends.
 - a. How many whole cookies does each friend get? If needed, have the student draw a picture. (Two whole cookies and one cookie is left over.)
 - b. What if you shared the remaining cookie as well? How much of the cookie would each friend get? ($\frac{1}{4}$ of the leftover cookie)
 - c. How would you write the full equation? ($9 \div 4 = 2\frac{1}{4}$)
3. What if you shared seven cookies equally between two friends?
 - a. How many whole cookies does each person get? (3 whole cookies)
 - b. How many cookies are left over? (1 cookie)
 - c. What if you shared the remaining cookie as well? How much of the cookie would each friend get? ($\frac{1}{2}$ of the leftover cookie)
 - d. How would you write the full equation? ($7 \div 2 = 3\frac{1}{2}$)
4. So, how can we write remainders in division problems? (As a fraction)
 - a. Is the remainder the numerator or the denominator? (Numerator)
 - b. And what is the denominator? (The divisor)
5. Complete p. 66: 1-2 (bottom section). Draw a picture to help visualize if needed. 🖍️
6. Complete p. 66: 3 (bottom section) on your dry-erase board.

STUDENT RESPONSE

1. In your math notebook, complete p. 66: 4, 7, and 11 (bottom section).

• Proper and Improper Fractions •

AR. Y4. T1. W4. L4

STREAM

Arithmetic



RESOURCES USED

Strayer-Upton, Book 2 (p. 67)

OBJECTIVES

Students will be able to investigate and define proper and improper fractions.

SPECIAL MATERIALS NEEDED

Money (dimes, \$1 bills), Ruler, All About Fractions & Decimals, Math Vocabulary Page

THE PLAN

1. To review the last few lessons, tell me everything you know about fractions. Draw out the idea that fractions can be parts of one whole or parts of a group. They are a way to write division.
2. Get \$1 out. This is one whole dollar.
 - a. Which coin represents a whole dollar broken up into tenths? (dime)
 - b. How many dimes make up a dollar? (10 dimes)
 - c. How would we write ten-tenths as a fraction? ($\frac{10}{10}$)
 - d. What does that make? (1 whole dollar)
 - e. Compare the numerator and denominator? (They are the same.)
 - f. So $\frac{10}{10} = 1$ or 10 divided by 10 = 1
3. Show me $\frac{9}{10}$ of a dollar. (9 dimes)
 - a. Is the numerator more or less than the denominator? (less)
 - b. Is $\frac{9}{10}$ of a dollar more or less than one whole dollar? (less)
4. Show me $\frac{13}{10}$ of a dollar. (13 dimes)
 - a. Is the numerator more or less than the denominator? (more)
 - b. Is $\frac{13}{10}$ of a dollar more or less than one whole dollar? (more)
 - c. If the student needs additional practice, complete p. 67: 1-4 out loud.
5. Complete p. 67: 5.

6. Write $\frac{7}{8}$, $\frac{8}{8}$, and $\frac{9}{8}$ on a dry-erase board. Fractions like $\frac{7}{8}$ are called **proper fractions**, and fractions like $\frac{8}{8}$ and $\frac{9}{8}$ are called **improper fractions**. What do you think is the difference between the proper and improper fractions? (Proper fractions are less than 1, and improper fractions are equal to or more than 1.) *If needed, ask the student, "Compare the numerators and denominators. How do they compare to one whole unit? Are the fractions smaller or larger than 1?"*
7. Read the last paragraph on p. 67, starting with, "A **proper fraction** is always smaller than 1..." 
8. Complete p. 67: 6 out loud.

STUDENT RESPONSE

1. On your All About Fractions page, write an example of a proper fraction, an improper fraction, and a fraction that equals 1.
2. On your Math Vocabulary Page, describe **proper** and **improper fractions**. Be sure to provide examples of each.