Tools and Topics

Inspiring Connections Course 1, Chapter 2

Spotlight On: Understanding Over Time

Anyone can be a "math person;" every person's brain grows and can learn new things. There will be some topics that your student understands quickly and some concepts that they may take longer to become comfortable with. This means that students should not be expected to attain a thorough understanding of a concept when it is first introduced. When a new topic is introduced in the course, there will be several problems to do for practice. Subsequent lessons and homework assignments will continue to practice the concept or skill over weeks and months so that students develop a thorough understanding over time.

The Big Picture

Growing From

Fraction and decimal operations

Working On

Solving ratio problems; Converting units

Growing To

Calculating unit rate; Converting between fractions, decimals, and percents

Need Help?

Methods & Meanings boxes are included in the Mathematician's Notebook as reference.

2.1.1: Multiplying Multi-Digit Decimals
2.1.3: Ratios
2.2.1: Venn Diagrams
2.2.2: Equivalent Measures
2.2.6: Dakabibi

Current Topics

Chapter 2 begins with an introduction to creating and understanding ratios, which were briefly introduced in Chapter 1. Mathematical vocabulary introduced in this chapter will help students discuss the ratios they are working with. Students will build on the foundation of number lines developed in Chapter 1 to create double number lines for determining equivalent ratios. Students will see rates and ratios again in Chapter 4, where they will learn about percents and unit rates.

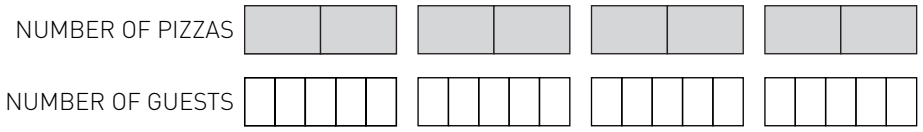
Ratio Language (Section 2.1)

Students are introduced to ratios. A **ratio** is a comparison between two quantities. Ratios can be represented in several ways, such as those shown here.

The ratio of circles to triangles is 3 to 4. 3:4 $\frac{3}{4}$

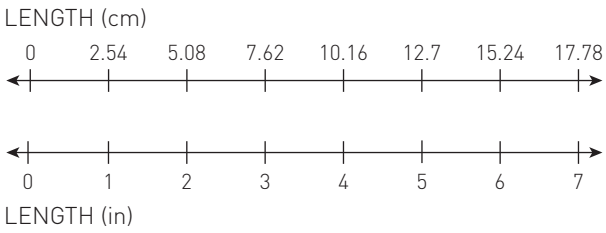
Equivalent Ratios (Section 2.2)

Students begin to write equivalent ratios by converting recipes. They are introduced to double number lines and tape diagrams to compare quantities. In the example shown, students start off by knowing that two pizzas will feed five guests. They complete the tape diagram to see that 20 guests will require 8 pizzas.



Measurement (Section 2.3)

Units of measure are introduced in this section. This provides students with another context in which to practice their new ratio skills. For example, students use a double number line to represent the measurements on a ruler as shown.



Try This at Home!

In this chapter, students used ratios to compare and convert units of measurement including inches, feet, centimeters, and others. What are some common units of measurement you use regularly? Talk about the different units with your student as you notice them around the house or out and about.