Tools and Topics

Inspiring Connections Course 2, Chapter 7

Spotlight On: Language Repertoire

How many languages are spoken in your student's household(s)? Do you ever discuss what your student is learning at school in multiple languages? There is research to show that activating students' full language repertoire, including nonverbal forms of communication, has benefits across school subjects, including math. For students who know multiple languages, it can be helpful to think about vocabulary words and their representations in other languages in addition to English.

The Big Picture

Growing From
Solving equations

Working On
Simple interest calculations; Calculating tax, gratuity, and commission

Growing To
Compound interest

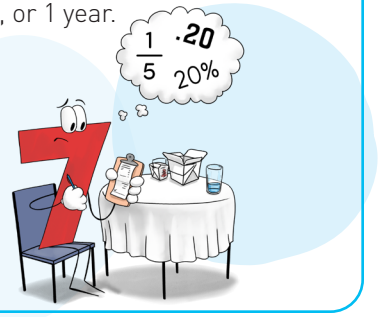
Need Help?

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

7.2.3: Part-to-Whole Relationship
7.3.3: Percent Increase or Decrease

Try This at Home!

With your student, research the annual percentage yield (APY) of various bank accounts and estimate how much money they would earn in interest by leaving an amount of money untouched for 3 months, 6 months, or 1 year.

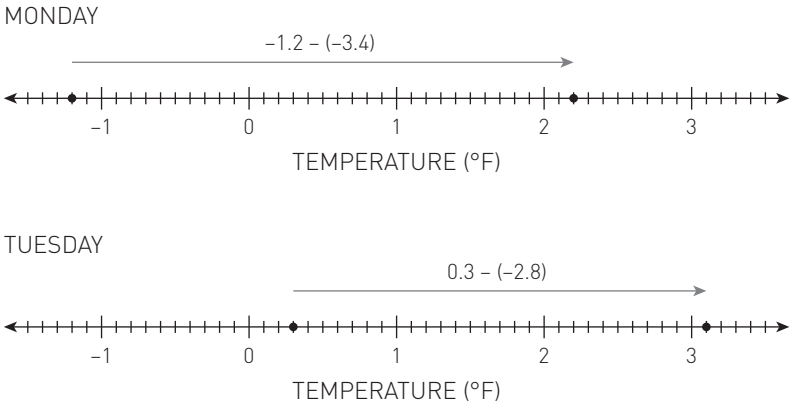


Current Topics

In this chapter, students will perform addition and subtraction of rational numbers. They will also solve percent problems involving simple interest, tax, gratuities, and commissions.

Operations With Rational Numbers (Section 7.1)

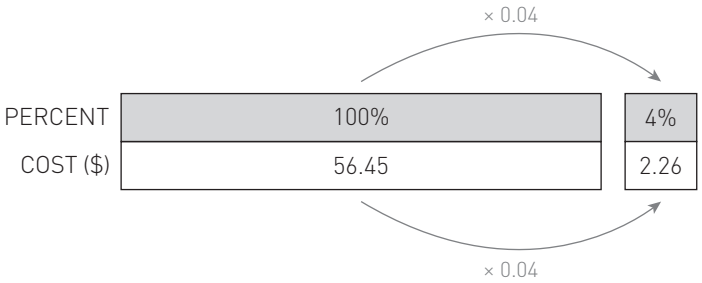
Students continue working with rational numbers by adding and subtracting using number lines. For example, the changes in temperature on two different days can be represented as subtraction on number lines, as shown.



Percent Change (Section 7.2)

Students solve multistep ratio and percent problems, such as calculating sales tax, tip, commission, and interest rates on purchases. Students create percentages of values using visual models and learn to solve percent problems arithmetically.

Consider shopping for groceries and having a total that amounts to $56.45. How much will the final cost be if the sales tax is 4%? The tape diagram shows how to represent this visually.



Percents in the Real World (Section 7.3)

This section builds upon the work in Section 7.2 as students use percents in real-world situations to determine markups and markdowns, percent change, and percent error.

Product	Wholesale Price ($)	Markup	Initial Price ($)	Days Since Last Sale	Current Price ($)
Sneakers	48	46%	70.08	70	70.08
Jewelry	25.75	123%	57.42	107	51.68
Hat	26	34%	34.84	2	34.84