

P.Cert.Gr.5 My Math Unit 9: Adding and Subtracting Fractions

Content Area: **Math**
Course(s):
Time Period: **March**
Length: **4-6 Weeks**
Status: **Obsolete**

Unit Overview

This unit explores strategies to use when adding and subtracting fractions.

Enduring Understandings

It is important to remember and apply certain strategies when adding and subtracting fractions.

Essential Questions

What strategies can be used when adding and subtracting fractions?

Instructional Strategies & Learning Activities

Chapter 9

Pacing Guide Suggested Pacing

Instruction	14 days
Review/Assessment	2 days
Total*	16 days

*Includes additional time for remediation and differentiation.

Lesson	Objective	Material & Manipulatives	Vocabulary
Lesson 1 <i>pp. 613-618</i> Round Fractions	Use number lines and benchmark fractions, such as $\frac{1}{2}$, to round fractions.	<ul style="list-style-type: none">• number lines• small classroom objects, including pencils and erasers	

- rulers

Lesson 2 *pp. 619-624*
Add Like Fractions

Add like fractions and solve word problems involving the addition of like fractions.

- fraction tiles

like fractions

Lesson 3 *pp. 625-630*
Subtract Like Fractions

Subtract like fractions and solve word problems involving the subtraction of like fractions.

- dry-erase boards
- dry-erase markers
- fraction tiles

Lesson 4 *pp. 631-636*
Hands On: Use Models to Add Unlike Fractions

Use models to add unlike fractions.

- fraction tiles

unlike fractions

Lesson 5 *pp. 637-642*
Add Unlike Fractions

Add unlike fractions and solve word problems involving the addition of unlike fractions.

- fraction tiles
- number lines
- two-color counters

Check My Progress
 Lesson 6 *pp. 645-650*
Hands On: Use Models to Subtract Unlike Fractions

Use models to subtract unlike fractions.

- fraction tiles
- index cards

Lesson 7 *pp. 651-656*
Subtract Unlike Fractions

Subtract unlike fractions and solve word problems involving the subtraction of unlike fractions.

- fraction tiles

Lesson 8 *pp. 657-662*
Problem-Solving Investigation: Determine Reasonable Answers

Solve problems by determining reasonable answers.

Lesson 9 <i>pp. 663-668</i>	Use number sense and benchmark	• number lines
Estimate Sums and Differences	fractions to estimate sums and differences.	

Check My Progress

Lesson 10 <i>pp. 671-676</i>	Explore adding mixed numbers using	• fraction circles
Hands On: Use Models to Add Mixed Numbers	models.	

Lesson 11 <i>pp. 677-682</i>	Add mixed numbers and solve word	• fraction tiles
Add Mixed Numbers	problems involving the addition of mixed numbers.	

Lesson 12 <i>pp. 683-688</i>	Subtract mixed numbers and solve word	• fraction tiles
Subtract Mixed Numbers	problems involving the subtraction of mixed numbers.	• play money

Lesson 13 <i>pp. 689-694</i>	Use fraction equivalence to subtract with	• fraction circles
Subtract with Renaming	renaming.	• fraction tiles

Integration of 21st Century Themes and Career Exploration

Students will work in cooperative groups to solve problems. Students will interact with the Smartboard to enhance the learning process.

CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP5	Consider the environmental, social and economic impacts of decisions.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP9	Model integrity, ethical leadership and effective management.
CRP.K-12.CRP11	Use technology to enhance productivity.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.

Technology Integration

Students will interact with the Smartboard to enhance the learning process. Students will use various web-based, interactive sites to expand the content as needed.

Interdisciplinary Connections

Students read and write throughout the whole unit.

LA.RL.5.4	Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.
LA.RI.5.4	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
LA.RI.5.10	By the end of year, read and comprehend literary nonfiction at grade level text-complexity or above, with scaffolding as needed.
LA.RF.5.4	Read with sufficient accuracy and fluency to support comprehension.
LA.RF.5.4.A	Read grade-level text with purpose and understanding.

Differentiation

Differentiation:

- Use of different resources to match the readiness levels of the students when working on the activities in the daily lessons.
- Respond to students' needs for reteaching, reinforcing, and extending learning.
- Use of a variety of instructional strategies to engage students in learning.
- Question prompts to promote student engagement
- Small group settings as needed for specific skills
- Use discussion to promote collaboration among students
- Integrate technology to offer varied learning experiences
- Adjust instruction based on formative tasks/assessments

Modifications & Accommodations

Modifications & Accommodations:

- In class support and scaffolding based on the individual IEP's
- Independent levels on My Math and Splash Math

Benchmark Assessments

Students will complete the AimsWeb testing.

Formative Assessments

Formative Assessments:

- Task completion
- Answers and discussions
- Student maps
- Bingo
- Quizzes
- Participation

Summative Assessments

Summative Assessments:

- Quizzes
- Final Test

Instructional Materials

My Math Textbook series grade 5

See materials in lessons above

Standards

MA.5.NF.A.1

Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.

MA.5.NF.A.2

Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.