

Adding and Subtracting Fractions

Lesson Overview

In this lesson students will use their prior knowledge of adding and subtracting integers and unlike fractions to add and subtract fractions with positives and negatives. Both of these skills have been previously taught and today they are putting the two skills together.

Standards Addressed

7.NS.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.

Disciplinary Literacy Best Practices

Reflective Writing
Elbow Partners

Lesson Plan

Time Required: 50 minutes

Disciplinary Vocabulary: rational number, common denominator, least common denominator

Materials Needed:

- index cards

Assessment:

Index cards with solution paths created by pairs

Engage

- The teacher will explain to students that previously they learned how to add and subtract unlike fractions and how to add positives and negatives.
- Teacher will explain that they are putting the two concepts together to learn a third concept.

Explore

- Teacher will lead students through questioning to review the two concepts.
- Teacher will lead the students to determine how the two concepts work together.
- Student pairs will be give the problem, $-3/8 + 2/5 =$.
- Student pairs will create a solution method for the task using their knowledge of addition and subtraction of fractions and their knowledge of addition and subtraction of integers.
- Each pair will record their solution path on an index card.

Explain

- Student pairs will share their solution path for the task with the class.

Teacher Biographical Information

Lesson Author:

Jane Meadors is a seventh grade math teacher at Bell Street Middle School in Clinton, SC. She has been in the field of education for more than twenty years. She has experience in special education, self-contained and resource at the middle school level and resource at the high school level. Her most recent education experience has been in seventh and eighth grade math. She holds a BS in Education from Presbyterian College and a Master's Degree in Special Education from Converse College