



Adding and Subtracting Fractions

Lesson Plan

Lesson Overview: In this lesson, students use concrete and pictorial models to represent fractions in the form a/b , including improper fractions. Students also compose and decompose fractions using sums of fractions with the same denominator, and connect models and actions to algorithms and symbolic representations for addition and subtraction of fractions of like denominators. Students use benchmark fractions to evaluate the reasonableness of sums and differences of fractions. TEKS: 4.3A, 4.3B, **4.3E** and 4.3F.

	Procedures	Facilitation Questions	Advance Preparation
Engage	<ul style="list-style-type: none"> Distribute one set of Fraction Strips (Engage Activity Master), one copy of the Engage Activity Sheet, scissors, and glue, tape, or paste to each student. Play the video to show students directions for building fractions with their fraction strips. Facilitate students as needed. Display the Engage Answer Key if desired. 	<ul style="list-style-type: none"> What does the numerator tell you about the number of pieces you will need? What does the denominator of the fraction tell you about the model? 	<ul style="list-style-type: none"> Make one copy of Engage Activity Sheet for each student. One set of fraction strips for each student. Use the Engage Activity Master if necessary (2 sets per sheet). scissors glue, tape, or paste
Explore	<ul style="list-style-type: none"> Arrange students in pairs. Distribute one set of cards from the Explore Activity Master, one copy of the Explore Activity Sheet, scissors, and glue, tape, or paste to each pair of students. Play the video for the class. Facilitate students as needed. Display the Explore Answer Key if desired. Use the video to discuss the debriefing questions. 	<ul style="list-style-type: none"> What does the numerator tell you about the number of parts of the model that need to be shaded? How does the numerator of the fraction relate to the digits in the decimal number? 	<ul style="list-style-type: none"> Make one copy of Explore Activity Sheet for each pair of students. Make one copy of the Explore Activity Master, page 1, on blue paper for each student pair. Make one copy of the Explore Activity Master, page 2, on pink paper for each student pair. scissors glue, tape, or paste
Explain	<ul style="list-style-type: none"> Distribute blank paper, scissors, glue, tape, or paste, and colored pencils or markers to each student. Play the video to show the construction of the foldable graphic organizer. Pause and replay as necessary. To differentiate, provide students with the Mission Support Sheet (fraction strips) as needed. Use the video to show then discuss the Journal Entry. Use the Trajectory Check questions to check for student understanding. 	<ul style="list-style-type: none"> What does the numerator tell you about a fraction? What does the denominator tell you about a fraction? What does the operation of addition tell you to physically do with your fraction strips? What does the operation of subtraction tell you to physically do with your fraction strips? 	<ul style="list-style-type: none"> Make copies of the Mission Support Sheet (master copies of fraction strips) for students as needed. blank paper (one sheet per student, plus a few extras) scissors glue, tape, or paste Access to Math Journals
Elaborate	<ul style="list-style-type: none"> Distribute one copy of the Elaborate Activity Sheet to each student. Play the video for the class. Facilitate students as they work through the activity. Display the Elaborate Activity Answer Key if desired. 	<ul style="list-style-type: none"> How can you use fraction strips to locate a fraction along the number line? For a mixed number, how can you adjust your number line to locate benchmark fractions? 	<ul style="list-style-type: none"> Make one copy of Elaborate Activity Sheet for each student. Make copies of the Mission Support Sheet for students as needed.
Evaluate	<ul style="list-style-type: none"> Display the questions or provide a printed copy of the Evaluation Questions for each student. Have students solve the problems in their Math Journal. 		<ul style="list-style-type: none"> Access to Math Journals If desired make a copy of the Evaluation Questions for each student.

