We will solve real-world problems involving multiplication of fractions. We will find the area of a rectangle with fractional sides by finding mathematical expressions.

We will multiply and divide fractions by modeling with fractions and their representations. Division will be a part of a set of operations that include addition, subtraction, multiplication, and division. Fractions are a subset of rational numbers.
UNIT PLANNING TOOL

Math Practices being emphasized:

- Reason abstractly and quantitatively
- Make sense of problems and persevere in solving them
- Use appropriate tools strategically

On Unit 10: Multiply & Divide Fractions

CCSSM:
5.NF.3 Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ b).
5.NF.4a Interpret the product (a/b) x q as a partition of q into b equal parts.
5.NF.4b Find the area of a rectangle with fractional side lengths by tiling it with unit squares.
5.NF.5a Interpret division of a fraction by a whole number, and compute such quotients.
5.NF.5b Interpret division of a whole number by a fraction, and compute such quotients.

Essential Questions

What strategies can be used to multiply and divide fractions?

Key Concepts

Understanding of fractions (part of a whole)
Multiply & divide fractions conceptually
Understand how to use models to show work
Solve real-life problems with fractions

Pre and Post Assessments

Pre: p. 240 My Math Assessment Masters
Post: Chapter Test p. 252-253 My Math Assessment Masters

Visual Models of Concepts

3 ÷ 3 = 9

\[
\text{3 \times 3} = \frac{11}{6}
\]

\[
\frac{1}{2} + 3
\]

\[
\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}
\]

\[
\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}
\]

Connections (Real World Applications)

Chefs in restaurants - cooking, baking, using recipes
Sharing wholes of something with friends

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Language Functions/Structures

So multiply $\frac{3}{4} \times \frac{2}{3}$. You divide the whole into parts based on the numerator. Then you count parts of each whole based on the numerator. The product of $\frac{3}{4} \times \frac{2}{3}$ is because...

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Focus and Motivation

Brain pop - multiplication and division of fractions

www.brainpop.com

Listen and Sketch: Inchworm and A Half
by Elinor J. Pinczes

I have, who has... activity