Grade 6

Division of Fractions

MACCSS Standards Being Addressed:

6.NS.1   Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.
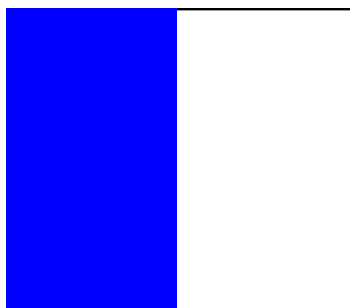
Rational:

Through the use of models and mathematical tools students will be able to understand and explain their thinking to exploit all options so that all students will have multiple ways to visually organize and think through problems involving division.

Ways to use diagrams or models to solve division of fractions:

  How many ¾-cup servings are in ½ of a cup of yogurt?

The students are asked to think about "What they have?" and then "What they need?"

Once they have answered those two questions they are asked to model how to get the answer by drawing a diagram. One way to draw out:
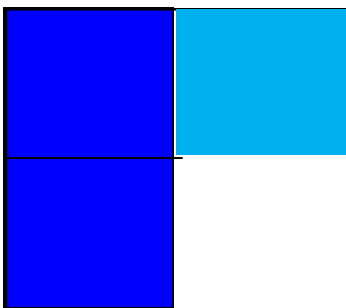

What I have? ½ cup of yogurt

What I need? ¾ cup of yogurt

Students can place diagrams together to visualize that they have $^2/_3$ cup serving of yogurt. They will be able to explain that they should have 2 out of the 3 parts that the y need to make a whole serving.

The students will discover, by the end of the unit, they can use an algorithm.