Dividing Fractions in Word Problems

Today's Standard

6.NS.A1 - 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. For example, create a story context for (2/3) ÷ (3/4) and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that (2/3) ÷ (3/4) = 8/9 because 3/4 of 8/9 is 2/3. (In general, (a/b) ÷ (c/d) = ad/bc.) How much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 3/4-cup servings are in 2/3 of a cup of yogurt? How wide is a rectangular strip of land with length 3/4 mi and area 1/2 square mi?

Cues	Notes
What is fraction division?	Fraction division involves dividing one fraction by another.
How do you use visual models?	Visual models help represent the division process and understand the relationship between fractions.
What are common misconceptions?	Common misconceptions include thinking division by a fraction makes the number smaller and confusing multiplication and division rules.
How to solve word problems?	To solve word problems, create a context, use visual models, and apply the relationship between multiplication and division.

Summary

Fraction division involves dividing one fraction by another, often using visual models to aid understanding. Common misconceptions include thinking division by a fraction makes the number smaller and confusing multiplication and division rules. Solving word problems requires creating a context, using visual models, and applying the relationship between multiplication and division.