



Topic A

Dividing Fractions by Fractions

6.NS.A.1

Focus Standard:	6.NS.A.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. <i>For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$). 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?</i>
Instructional Days:	8	
	Lesson 1:	Interpreting Division of a Fraction by a Whole Number—Visual Models (P) ¹
	Lesson 2:	Interpreting Division of a Whole Number by a Fraction—Visual Models (P)
	Lessons 3–4:	Interpreting and Computing Division of a Fraction by a Fraction—More Models (P, P)
	Lesson 5:	Creating Division Stories (P)
	Lesson 6:	More Division Stories (P)
	Lesson 7:	The Relationship Between Visual Fraction Models and Equations (S)
	Lesson 8:	Dividing Fractions and Mixed Numbers (P)

In Topic A, students extend their previous understanding of multiplication and division to divide fractions by fractions. Students determine quotients through visual models, such as bar diagrams, tape diagrams, arrays, and number line diagrams. They construct division stories and solve word problems involving division of fractions (**6.NS.A.1**). Students understand and apply partitive division of fractions to determine how much is in each group. They explore real-life situations that require them to ask themselves, “How much is one share?” and “What part of the unit is that share?” Students use measurement to determine quotients of fractions. They are presented conceptual problems where they determine that the quotient represents how many of the divisor is in the dividend. Students look for and uncover patterns while modeling quotients of fractions to ultimately discover the relationship between multiplication and division. Later in the module, students understand and apply the direct correlation of division of fractions to division of decimals.

¹Lesson Structure Key: **P**-Problem Set Lesson, **M**-Modeling Cycle Lesson, **E**-Exploration Lesson, **S**-Socratic Lesson