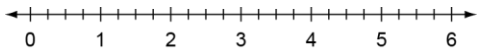
Content Standard	***MAFS.5.NF*** *Number and Operations – Fractions* ***MAFS.5.NF.2*** *Apply and extend previous understandings of multiplication and division to multiply and divide fractions.* **MAFS.5.NF.2.7** *Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.* **MAFS.5.NF.2.7a** Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for* $\left(\frac{1}{3}\right) \div 4$*, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that* $\left(\frac{1}{3}\right) \div 4 = \frac{1}{12}$ *because* $\left(\frac{1}{12}\right) \times 4 = \frac{1}{3}$. **MAFS.5.NF.2.7b** Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for* $4 \div \left(\frac{1}{5}\right)$ *,and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that* $4 \div \left(\frac{1}{5}\right) = 20$ *because* $20 \times \left(\frac{1}{5}\right) = 4$. **MAFS.5.NF.2.7c** Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share* $\frac{1}{2}$ *lb. of chocolate equally? How many* $\frac{1}{3}$*-cup servings are in 2 cups of raisins?*
Assessment Limits	Division of unit fractions by a non-zero whole number, or Division of a non-zero whole number by a unit fraction.
Calculator	No
Acceptable Response Mechanisms	Equation Response Graphic Response –Drag and Drop, Drawing/Graphing, Hot Spot Multiple Choice Response Natural Language Response

Context	Allowable
Example	
Context	Either the whole number or the denominator of the fraction is between 5 and 10.
Context easier	Both the whole number and the denominator of the fraction are less than or equal to 5.
Context more difficult	Either the whole number or the denominator of the fraction is greater than or equal to 10.

Sample Item Stem	Response Mechanism	Notes, Comments
An expression is shown. $5 \div \frac{1}{3}$ What is the value of the expression?	Equation Response	
An expression is shown. $5 \div \frac{1}{7}$ What is the value of the expression?	Equation Response	
An expression is shown. $12 \div \frac{1}{7}$ What is the value of the expression?	Equation Response	
Julio has 4 pounds of candy. He wants to put the candy into bags so that each bag has $\frac{1}{3}$ pound. Which expression shows how to calculate the number of bags of candy Julio can make? A. $3 \times \frac{1}{4}$ B. $\frac{1}{4} \times 3$ C. $3 \div \frac{1}{4}$ D. $\frac{1}{4} \div 3$	Multiple Choice Response	
Julio wrote the division equation shown. $8 \div \frac{1}{2} = 16$ Which multiplication equation can Julio use to show that his work is correct? A. $16 \times \frac{1}{2} = 8$ B. $16 \times 2 = 32$ C. $16 \times 8 = \frac{1}{2}$ D. $16 \times 8 = 128$	Multiple Choice Response	

Julio has 12 pounds of candy. He wants to put the candy into bags so that each bag has $\frac{1}{6}$ pound of candy. How many bags of candy can Julio make?	Equation Response	
Julio has 6 pounds of candy. He wants to put the candy into bags so that each bag has $\frac{1}{2}$ pound of candy. How many bags of candy can Julio make? A. Click on the number line to create sections that model the solution to this problem.  B. Select the number of bags that Julio can make.	Graphic Response – Hot Spot	