Grade 6 Math C1 TB

Claim 1: Concepts and Procedures Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.	
Content Domain: **The Number System**	
Target B [m]: Apply and extend previous understandings of multiplication and division to divide fractions by fractions. (DOK 1, 2) Tasks for this target will ask students to divide fractions by fractions, including using this as a strategy to solve one-step contextual problems.	
Standards:	6.NS.1
DOK Target(s):	1, 2
Evidence Required:	1. The student interprets quotients of fractions using visual fraction models, equations, and the relationship between multiplication and division. 2. The student solves real-world and mathematical one-step problems involving division of fractions by fractions.
Allowable Item Types*:	SR, CR, TE
Task Models:	1. SR (DOK 1) **Prompt Features:** The student is prompted to identify statements relating quotients of fractions to multiplication and division. **Stimulus:** The student is presented with quotients of fractions. 1. CR (DOK 2) **Prompt Features:** The student is prompted to write statements to explain the relationship of a quotient of fractions to multiplication and division. Or the student is prompted to write a story context to explain the relationship of a quotient of fractions to multiplication and division. **Stimulus:** The student is presented with quotients of fractions. 1. TE (DOK 2) **Prompt Features:** The student is prompted to create a visual fraction model to show the relationship of a quotient of fractions to multiplication and division. **Stimulus:** The student is presented with quotients of fractions. **Interaction:** The student uses a drawing tool to draw the fraction models. 2. SR (DOK 1, 2) **Prompt Features:** The student is prompted to identify the solution to one-step problems involving division of fractions by fractions. **Stimulus:** The student is presented with one-step problems involving division of fractions by fractions in real-world and mathematical contexts.

	2. CR (DOK 2) **Prompt Features:** The student is prompted to solve and write the answer to one-step problems involving division of fractions by fractions. **Stimulus:** The student is presented with one-step problems involving division of fractions by fractions in real-world and mathematical contexts. 2. TE (DOK 2) **Prompt Features:** The student is prompted to create visual fraction models to demonstrate the solutions and solve one-step problems involving division of fractions by fractions. **Stimulus:** The student is presented with one-step problems involving division of fractions by fractions in real-world and mathematical contexts. **Interaction:** The student uses a drawing tool to draw the fraction models.
Allowable Stimulus Materials:	visual fraction models
Allowable Disciplinary Vocabulary:	fraction, quotient, product, visual fraction model
Allowable Tools:	For some items, calculators may be used. For TE items, computer drawing software may be necessary.
Target-Specific Attributes:	The problems involving division of fractions by fractions should be able to be solved in one step.
Key Nontargeted Constructs:	
Accessibility Concerns:	Blind or low-vision students may have difficulty with aspects of this target related to visual fraction models.
Sample Items:	MAT.06.SR.1.000NS.B.179

*SR = selected-response item; CR = constructed-response item; TE = technology-enhanced item; ER = extended-response item; PT = performance task