

## Grade 6 Math C1 TG

<p><b>Claim 1:</b> Concepts and Procedures Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.</p>	
<p>Content Domain: <b>Expressions and Equations</b></p>	
<p><b>Target G [m]:</b> Represent and analyze quantitative relationships between dependent and independent variables. (DOK 1, 2)</p> <p>Tasks for this target will ask students to select or write an equation that expresses one quantity in terms of another. Some tasks will target the relationship between the variables in an equation and their representation in a table or graph.</p> <p>Some tasks may connect the content of this target with 6.EE Target F.</p>	
Standards:	6.EE.9
DOK Target(s):	1, 2
Evidence Required:	<ol style="list-style-type: none"> <li>1. The student selects an equation to express one quantity versus another quantity using dependent and independent variables.</li> <li>2. The student writes an equation to express one quantity versus another quantity using dependent and independent variables.</li> <li>3. The student identifies the relationship among dependent and independent variables in the forms of an equation and a table.</li> <li>4. The student identifies the relationship among dependent and independent variables in the forms of an equation and a graph.</li> <li>5. The student identifies the relationship among dependent and independent variables in the forms of a table and a graph.</li> </ol>
Allowable Item Types*:	SR, CR
Task Models:	<ol style="list-style-type: none"> <li>1. SR (DOK 1) <b>Prompt Features:</b> The student is prompted to identify an equation that uses dependent and independent variables to relate two quantities. <b>Stimulus:</b> The student is presented with independent or dependent quantities in a real-world context.</li> <li>2. CR (DOK 2) <b>Prompt Features:</b> The student is prompted to write an equation that uses dependent and independent variables to relate two quantities. <b>Stimulus:</b> The student is presented with independent or dependent quantities in a real-world context.</li> <li>3. SR (DOK 1) <b>Prompt Features:</b> The student is prompted to identify correct statements about the relationship between dependent and</li> </ol>

	<p>independent variables in the forms of an equation and a table.  <b>Stimulus:</b> The student is presented with independent or dependent variables in the forms of an equation and a table.</p> <p>3. CR (DOK 2)  <b>Prompt Features:</b> The student is prompted to write correct statements about the relationship among dependent and independent variables in the forms of an equation and a table.  <b>Stimulus:</b> The student is presented with independent or dependent variables in the forms of an equation and a table.</p> <p>4. SR (DOK 2)  <b>Prompt Features:</b> The student is prompted to identify correct statements about the relationship among dependent and independent variables in the forms of an equation and a graph.  <b>Stimulus:</b> The student is presented with independent or dependent variables in the forms of an equation and a graph.</p> <p>4. CR (DOK 2)  <b>Prompt Features:</b> The student is prompted to write correct statements about the relationship among dependent and independent variables in the forms of an equation and a graph.  <b>Stimulus:</b> The student is presented with independent or dependent variables in the forms of an equation and a graph.</p> <p>5. SR (DOK 2)  <b>Prompt Features:</b> The student is prompted to identify correct statements about the relationship among dependent and independent variables in the forms of a table and a graph.  <b>Stimulus:</b> The student is presented with independent or dependent variables in the forms of a table and a graph.</p> <p>5. CR (DOK 2)  <b>Prompt Features:</b> The student is prompted to write correct statements about the relationship among dependent and independent variables in the forms of a table and a graph.  <b>Stimulus:</b> The student is presented with independent or dependent variables in the forms of a table and a graph.</p>
Allowable Stimulus Materials:	graphs, tables
Allowable Disciplinary Vocabulary:	variable, equation, inequality, dependent variable, independent variable, relation
Allowable Tools:	
Target-Specific Attributes:	
Key Nontargeted Constructs:	
Accessibility Concerns:	Blind or low-vision students may have difficulty with aspects of this target related to tables and graphs.
Sample Items:	

## Grade 6 Mathematics Item Specification C1 TG

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