

## Performance Level Descriptors – Grade 6 Mathematics

	Grade 6 Math : Sub-Claim A			
	The student solves problems involving the Major Content for grade/course with connections to the Standards for Mathematical Practice.			
	Level 5: Distinguished Command	Level 4: Strong Command	Level 3: Moderate Command	Level 2: Partial Command
<b>Multiplying and Dividing with Fractions</b>  6.NS.1-2	Applies and extends previous understandings of multiplication and division <b>to create</b> and solve word problems involving division of fractions by fractions.	Applies and extends previous understandings of multiplication and division to solve word problems involving <b>division of fractions by fractions</b> .	Applies and extends previous understandings of multiplication and division to divide fractions <b>with unlike denominators</b> and solve word problems with prompting embedded within the problem.	Applies and extends previous understandings of multiplication and division to divide fractions with common denominators and to solve word problems with prompting embedded within the problem.
<b>Ratios</b>  6.RP.1 6.RP.2 6.RP.3a 6.RP.3b 6.RP.3c-1 6.RP.3c-2 6.RP.3d	Uses ratio and rate reasoning to solve real-world and mathematical problems, including ratio, unit rate percent and unit conversion problems.  Uses and <b>connects a variety</b> of representations and strategies to solve these problems.  Finds missing values in tables and plots values on the coordinate plane.	Uses ratio and rate reasoning to solve real-world and mathematical problems, including ratio, unit rate, percent and unit conversion problems.  Uses <b>a variety of representations</b> and strategies to solve these problems.  Finds missing values in tables and plots values on the coordinate plane.	Uses ratio and rate reasoning to solve <b>real-world</b> and mathematical problems, including ratio, unit rate, percent and unit conversion problems.  Uses a limited variety of representations and strategies to solve these problems.  Finds missing values in tables and plots values on the coordinate plane.	Uses ratio and rate reasoning to solve mathematical problems, including ratio, unit rate, percent and unit conversion problems.  Uses a limited variety of representations and strategies to solve these problems.  Finds missing values in tables and plots values on the coordinate plane.

## Performance Level Descriptors – Grade 6 Mathematics

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<b>Rational Numbers</b>  6.NS.5 6.NS.6 6.NS.7 6.NS.8	<p>Understands that positive and negative numbers describe mathematical or real-world quantities which have opposite values or directions and can be represented on a number line and compared with or without the use of a number line.</p> <p>Understands and interprets the absolute value of a rational number.</p> <p>Plots ordered pairs on a coordinate plane to solve real-world and mathematical problems.</p> <p>Understands (or recognizes) that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</p> <p>Distinguishes comparisons of absolute value from</p>	<p>Understands that positive and negative numbers describe mathematical or real-world quantities which have opposite values or directions and can be represented on a number line and compared with or without the use of a number line.</p> <p>Understands <b>and interprets</b> the absolute value of a rational number.</p> <p>Plots ordered pairs on a coordinate plane to solve real-world and mathematical problems.</p> <p>Understands <b>(or recognizes) that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</b></p> <p><b>Distinguishes comparisons of absolute value from</b></p>	<p>Understands that positive and negative numbers describe mathematical or real-world quantities which have opposite values or directions and can be represented on a number line <b>and compared with or without the use of a number line.</b></p> <p><b>Understands</b> the absolute value of a rational number.</p> <p>Plots ordered pairs on a coordinate plane to solve <b>real-world and</b> mathematical problems.</p>	<p>Understands that positive and negative numbers describe mathematical or real-world quantities which have opposite values or directions and can be represented on a number line.</p> <p>Determines the absolute value of a rational number.</p> <p>Plots ordered pairs on a coordinate plane to solve mathematical problems.</p>

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	<b>Level 5: Distinguished Command</b>	<b>Level 4: Strong Command</b>	<b>Level 3: Moderate Command</b>	<b>Level 2: Partial Command</b>
	statements about order.  <b>Recognizes patterns and makes generalizations about characteristics of positive and negative numbers.</b>	<b>statements about order.</b>		
<b>Expressions</b>  6.EE.1-1 6.EE.1-2 6.EE.2a 6.EE.2b 6.EE.2c-1 6.EE.2c-2 6.EE.4	Writes, reads and evaluates numerical and algebraic expressions, including those that contain whole number exponents.  Identifies parts of an algebraic or numerical expression using mathematical terms <b>and views one or more parts of an expression as a single entity.</b>  Identifies equivalent expressions using properties of operations.	<b>Writes</b> , reads and evaluates numerical and algebraic expressions, including those that contain whole number exponents.  Identifies parts of an algebraic or numerical expression using mathematical terms.  Identifies equivalent expressions using properties of operations.	Reads and <b>evaluates</b> numerical and algebraic expressions, including those that contain whole number exponents.  Identifies parts of an algebraic or numerical expression using mathematical terms.  <b>Identifies equivalent expressions using properties of operations.</b>  <b>Writes numerical expressions and some algebraic expressions, including those that contain whole number exponents.</b>	Reads numerical and algebraic expressions including those that contain whole number exponents.  Identifies parts of an algebraic or numerical expression using mathematical terms.

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<b>Equations and Inequalities</b>  6.EE.5-2 6.EE.6 6.EE.7 6.EE.8 6.EE.9	<p>Uses variables to represent numbers and write expressions and single-step equations to solve real-world and mathematical problems and understand their solutions.</p> <p><b>Analyzes</b> the relationship between dependent and independent variables and relates tables and graphs to equations.</p> <p>Writes and graphs inequalities to represent a constraint or condition in a real-world or mathematical problem.</p> <p>Understands that there are an infinite number of solutions for an inequality.</p>	<p>Uses variables to represent numbers and writes expressions and single-step equations to solve real-world and mathematical problems <b>and understand their solutions.</b></p> <p><b>Expresses a relationship between dependent and independent variables</b> and relates tables and graphs to equations.</p> <p>Writes and graphs inequalities to represent a constraint or condition in a real-world or mathematical problem.</p> <p><b>Understands that there are an infinite number of solutions for an inequality.</b></p>	<p>Uses variables to represent numbers and writes expressions and single-step equations to solve <b>real-world</b> or mathematical problems.</p> <p>Relates tables and graphs to the equations.</p> <p><b>Writes</b> and graphs inequalities to represent a constraint or condition in a <b>real-world</b> or mathematical problem.</p>	<p>Uses variables to represent numbers and writes expressions and single-step equations to solve mathematical problems.</p> <p>Relates tables and graphs to the equations.</p> <p>Graphs inequalities to represent a constraint or condition in a mathematical problem.</p>

## Performance Level Descriptors – Grade 6 Mathematics

	<b>Grade 6 Math: Sub-Claim B</b>			
	The student solves problems involving the Additional and Supporting Content for the grade/course with connections to the Standards for Mathematical Practice.			
	<b>Level 5: Distinguished Command</b>	<b>Level 4: Strong Command</b>	<b>Level 3: Moderate Command</b>	<b>Level 2: Partial Command</b>
<b>Factors and Multiples</b>  6.NS.4-1 6.NS.4-2	Finds greatest common factors and least common multiples.  <b>Consistently</b> uses the distributive property to rewrite the sum of two whole numbers with a common factor as a multiple of a sum of two whole numbers with no common factor.	Finds greatest common factors and least common multiples.  <b>In most cases,</b> uses the distributive property to rewrite the sum of two whole numbers with a common factor as a multiple of a sum of two whole numbers with <b>no</b> common factor.	Finds greatest common factors and least common multiples.  <b>Uses the distributive property to rewrite the sum of two whole numbers with a common factor as a multiple of a sum of two whole numbers with a common factor.</b>	Finds greatest common factors and least common multiples.
<b>Geometry</b>  6.G.2-1 6.G.2-2 6.G.3 6.G.4	Solves real-world and mathematical problems involving area of polygons by composing into rectangles or decomposing into triangles and other shapes.  Determines measurements of polygons in the coordinate plane.  Determines and uses nets of three-dimensional figures to find surface area.	Solves real-world and mathematical problems involving area of polygons by composing into rectangles or decomposing into triangles and other shapes.  Determines measurements of polygons in the coordinate plane.  Determines and uses nets of three-dimensional figures to find surface area.	Solves <b>real-world</b> and mathematical problems involving area of polygons by either composing into rectangles or decomposing into triangles and other shapes.  Determines measurements of polygons in the coordinate plane.  <b>Determines</b> and uses nets of three-dimensional figures to find surface area.	Solves mathematical problems involving area of polygons by either composing into rectangles or decomposing into triangles and other shapes.  Determines measurements of polygons in the coordinate plane.  Uses nets of three-dimensional figures to find surface area.

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	<b>Grade 6 Math: Sub-Claim B</b>			
	The student solves problems involving the Additional and Supporting Content for the grade/course with connections to the Standards for Mathematical Practice.			
	<b>Level 5: Distinguished Command</b>	<b>Level 4: Strong Command</b>	<b>Level 3: Moderate Command</b>	<b>Level 2: Partial Command</b>
	<p>Finds volume of right rectangular prisms with fractional edge lengths by packing them with unit cubes and using formulas.</p> <p>Uses volume formulas to find unknown measurements.</p> <p><b>Understands the concepts of area and volume in order to solve unstructured and/or complex problems.</b></p>	<p>Finds volume of right rectangular prisms with fractional edge lengths by packing them with unit cubes and using formulas.</p> <p><b>Uses volume formulas to find unknown measurements.</b></p>	<p>Finds volume of right rectangular prisms with fractional edge lengths by packing them with unit cubes and using formulas.</p>	<p>Finds volume of right rectangular prisms with fractional edge lengths by packing them with unit cubes and using formulas.</p>
<p><b>Statistics and Probability</b></p> <p>6.SP.2 6.SP.3 6.SP.4 6.SP.5</p>	<p>Recognizes and <b>describes</b> a statistical question, and understands that a set of collected data has a distribution which can be described by its center, spread and overall shape.</p> <p>Understands the purpose of center and variability and that each can be summarized with a single number.</p>	<p>Recognizes a statistical question and understands that a set of collected data has a distribution which can be described by its center, spread and overall shape.</p> <p>Understands the purpose of center <b>and variability</b> and that each can be summarized with a single number.</p>	<p>Recognizes a statistical question and understands that a set of collected data has a distribution which can be described by its center, spread and overall shape.</p> <p>Understands the purpose of center and that it can be summarized with a single number.</p>	<p>Recognizes a statistical question and understands that a set of collected data has a distribution which can be described by its center, spread and overall shape.</p> <p>Understands the purpose of center and that it can be summarized with a single number.</p>

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	<p>Displays numerical data in plots on a number line, including dot plots, histograms and box plots, and <b>determines which display is the most appropriate.</b></p> <p>Summarizes numerical data sets in relation to their context, such as by reporting the number of observations, describing the nature of the attributes under investigation and using measures of center and variability.</p> <p>Determines which measures of center and variability are the most appropriate for a set of data.</p>	<p>Displays numerical data in plots on a number line, including dot plots, histograms and box plots.</p> <p>Summarizes numerical data sets in relation to their context, such as by reporting the number of observations, describing the nature of the attributes under investigation and using measures of center and variability.</p> <p><b>Determines which measures of center and variability are the most appropriate for a set of data.</b></p>	<p>Displays numerical data in plots on a number line, including dot plots, histograms and <b>box plots.</b></p> <p>Summarizes numerical data sets in relation to their context, such as by reporting the number of observations, <b>describing the nature of the attributes under investigation</b> and using measures of center and variability.</p>	<p>Displays numerical data in plots on a number line, including dot plots and histograms.</p> <p>Summarizes numerical data sets in relation to their context, such as by reporting the number of observations and using measures of center.</p>

## Performance Level Descriptors – Grade 6 Mathematics

	<b>Grade 6: Sub-Claim C</b>			
	The student expresses grade/course-level appropriate mathematical reasoning by constructing viable arguments, critiquing the reasoning of others and/or attending to precision when making mathematical statements.			
	<b>Level 5: Distinguished Command</b>	<b>Level 4: Strong Command</b>	<b>Level 3: Moderate Command</b>	<b>Level 2: Partial Command</b>
<b>Properties of Operations</b>  6.C.1.1 6.C.2	<p>Clearly constructs and communicates a complete response based on the properties of operations and the relationship between addition and subtraction or between multiplication and division, including:</p> <ul style="list-style-type: none"> <li>• a logical approach based on a conjecture and/or stated assumptions</li> <li>• a logical and complete progression of steps</li> <li>• precision of calculation</li> <li>• correct use of grade-level vocabulary, symbols and labels</li> <li>• complete justification of a conclusion</li> <li>• <b>generalization of an argument or conclusion</b></li> <li>• evaluating, interpreting, and critiquing the validity and <b>efficiency</b></li> </ul>	<p><b>Clearly</b> constructs and communicates a complete response based on the properties of operations and the relationship between addition and subtraction or between multiplication and division, including:</p> <ul style="list-style-type: none"> <li>• a logical approach based on a conjecture and/or stated assumptions</li> <li>• a logical and <b>complete</b> progression of steps</li> <li>• <b>precision</b> of calculation</li> <li>• <b>correct</b> use of grade-level vocabulary, symbols and labels</li> <li>• <b>complete</b> justification of a conclusion</li> <li>• evaluating, <b>interpreting and critiquing</b> the validity of other’s responses, approaches and reasoning.</li> </ul>	<p>Constructs and communicates a <b>complete</b> response based on the properties of operations and the relationship between addition and subtraction or between multiplication and division, including:</p> <ul style="list-style-type: none"> <li>• <b>a logical</b> approach based on a conjecture and/or stated assumptions</li> <li>• <b>a logical</b>, but incomplete, progression of steps</li> <li>• <b>minor</b> calculation errors</li> <li>• <b>some</b> use of grade-level vocabulary, symbols and labels</li> <li>• partial justification of a conclusion</li> <li>• <b>evaluating the validity of other’s approaches and conclusions.</b></li> </ul>	<p>Constructs and communicates an incomplete response based on the properties of operations and the relationship between addition and subtraction or between multiplication and division, which may include:</p> <ul style="list-style-type: none"> <li>• a faulty approach based on a conjecture and/or stated assumptions</li> <li>• an incomplete or illogical progression of steps</li> <li>• major calculation errors</li> <li>• limited use of grade-level vocabulary, symbols and labels</li> <li>• partial justification of a conclusion</li> </ul>

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	The student expresses grade/course-level appropriate mathematical reasoning by constructing viable arguments, critiquing the reasoning of others and/or attending to precision when making mathematical statements.			
	<b>Level 5: Distinguished Command</b>	<b>Level 4: Strong Command</b>	<b>Level 3: Moderate Command</b>	<b>Level 2: Partial Command</b>
	of other’s responses, approaches and reasoning, <b>and providing counter-examples where applicable.</b>			
<b>Concrete Referents and Diagrams</b>  6.C.3 6.C.4 6.C.5	Clearly constructs and communicates a complete response based on concrete referents provided in the prompt or constructed by the student such as: diagrams that are connected to a written (symbolic) method, number line diagrams or coordinate plane diagrams, including: <ul style="list-style-type: none"> <li>• a logical approach based on a conjecture and/or stated assumptions</li> <li>• a logical and complete progression of steps</li> <li>• precision of calculation</li> <li>• correct use of grade-level vocabulary,</li> </ul>	<b>Clearly</b> constructs and communicates a complete response based on concrete referents provided in the prompt or constructed by the student such as: diagrams that are connected to a written (symbolic) method, number line diagrams or coordinate plane diagrams, including: <ul style="list-style-type: none"> <li>• a logical approach based on a conjecture and/or stated assumptions</li> <li>• a logical and <b>complete</b> progression of steps</li> <li>• <b>precision</b> of calculation</li> <li>• <b>correct</b> use of grade-level vocabulary,</li> </ul>	Constructs and communicates a <b>complete</b> response based on concrete referents provided in the prompt or <b>in simple cases, constructed by the student</b> such as: diagrams <b>that are connected to a written (symbolic) method</b> , number line diagrams or coordinate plane diagrams, including: <ul style="list-style-type: none"> <li>• a <b>logical</b> approach based on a conjecture and/or stated assumptions</li> <li>• a <b>logical</b>, but incomplete, progression of steps</li> <li>• <b>minor</b> calculation errors</li> <li>• <b>some use</b> of grade-level</li> </ul>	Constructs and communicates an incomplete response based on concrete referents provided in the prompt such as: diagrams, number line diagrams or coordinate plane diagrams, which may include: <ul style="list-style-type: none"> <li>• a faulty approach based on a conjecture and/or stated or faulty assumptions</li> <li>• an incomplete or illogical progression of steps</li> <li>• major calculation errors</li> <li>• limited use of grade-</li> </ul>

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Grade 6: Sub-Claim C				
The student expresses grade/course-level appropriate mathematical reasoning by constructing viable arguments, critiquing the reasoning of others and/or attending to precision when making mathematical statements.				
	Level 5: Distinguished Command	Level 4: Strong Command	Level 3: Moderate Command	Level 2: Partial Command
	symbols and labels <ul style="list-style-type: none"> <li>complete justification of a conclusion</li> <li><b>generalization of an argument or conclusion</b></li> <li>evaluating, interpreting and critiquing the validity and efficiency of other’s responses, approaches and reasoning, and <b>provides a counter-example where applicable.</b></li> </ul>	symbols and labels <ul style="list-style-type: none"> <li><b>complete justification</b> of a conclusion</li> <li>evaluating, <b>interpreting and critiquing</b> the validity of other’s <b>responses, approaches and reasoning.</b></li> </ul>	vocabulary, symbols and labels <ul style="list-style-type: none"> <li>partial justification of a conclusion</li> <li><b>evaluating the validity of other’s approaches and conclusions.</b></li> </ul>	level vocabulary, symbols and labels <ul style="list-style-type: none"> <li>partial justification of a conclusion</li> </ul>
<b>Distinguish Correct Explanation/ Reasoning from that which is Flawed</b>  6.C.6 6.C.7 6.C.8.1 6.C.8.2 6.C.9	Clearly constructs and communicates a complete response to a given equation, multi-step problem, proposition or conjecture, including: <ul style="list-style-type: none"> <li>a logical approach based on a conjecture and/or stated assumptions</li> <li>a logical and complete progression of steps</li> </ul>	Clearly constructs and communicates a complete response to a given equation, multi-step problem, proposition or conjecture, including: <ul style="list-style-type: none"> <li>a logical approach based on a conjecture and/or stated assumptions</li> <li>a logical and <b>complete</b> progression of steps</li> </ul>	Constructs and communicates a <b>complete</b> response to a given equation, multi-step problem, proposition or conjecture, including: <ul style="list-style-type: none"> <li>a <b>logical</b> approach based on a conjecture and/or stated assumptions</li> <li>a <b>logical, but incomplete,</b></li> </ul>	Constructs and communicates an incomplete response to a given equation, multi-step problem, proposition or conjecture, including: <ul style="list-style-type: none"> <li>an approach based on a conjecture and/or stated or faulty assumptions</li> <li>an incomplete or illogical progression of</li> </ul>

## Performance Level Descriptors – Grade 6 Mathematics

Grade 6: Sub-Claim C				
The student expresses grade/course-level appropriate mathematical reasoning by constructing viable arguments, critiquing the reasoning of others and/or attending to precision when making mathematical statements.				
	Level 5: Distinguished Command	Level 4: Strong Command	Level 3: Moderate Command	Level 2: Partial Command
	<ul style="list-style-type: none"> <li>• precision of calculation</li> <li>• correct use of grade-level vocabulary, symbols and labels</li> <li>• complete justification of a conclusion</li> <li>• <b>generalization of an argument or conclusion</b></li> <li>• evaluating, interpreting and critiquing the validity and efficiency of other’s responses, approaches and reasoning, and <b>providing a counter-example where applicable.</b></li> <li>• identifying and describing errors in solutions and presents correct solutions.</li> <li>• <b>distinguishing correct explanation/reasoning from that which is flawed. If there is a flaw, presents correct reasoning.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>precision</b> of calculation</li> <li>• <b>correct</b> use of grade-level vocabulary, symbols and labels</li> <li>• <b>complete</b> justification of a conclusion</li> <li>• evaluating, <b>interpreting and critiquing</b> the validity of other’s responses, approaches and <b>reasoning.</b></li> <li>• identifying and describing errors in solutions and <b>presents correct solutions.</b></li> </ul>	<p>progression of steps</p> <ul style="list-style-type: none"> <li>• minor calculation errors</li> <li>• <b>some</b> use of grade-level vocabulary, symbols and labels</li> <li>• partial justification of a conclusion</li> <li>• <b>evaluating the validity of other’s approaches and conclusion.</b></li> <li>• <b>identifying and describing errors in solutions.</b></li> </ul>	<p>steps</p> <ul style="list-style-type: none"> <li>• major calculation errors</li> <li>• limited use of grade-level vocabulary, symbols and labels</li> <li>• partial justification of a conclusion</li> </ul>

## Performance Level Descriptors – Grade 6 Mathematics

Grade 6 : Sub-Claim D				
The student solves real-world problems with a degree of difficulty appropriate to the grade/course by applying knowledge and skills articulated in the standards for the current grade/course (or for more complex problems, knowledge and skills articulated in the standards for previous grades/courses), engaging particularly in the Modeling practice, and where helpful making sense of problems and persevering to solve them, reasoning abstractly, and quantitatively, using appropriate tools strategically, looking for the making use of structure and/or looking for and expressing regularity in repeated reasoning.				
	Level 5: Distinguished Command	Level 4: Strong Command	Level 3: Moderate Command	Level 2: Partial Command
<b>Modeling</b>  6.D.1 6.D.2 6.D.3	Devises a plan to apply mathematics in solving problems arising in everyday life, society and the workplace by: <ul style="list-style-type: none"> <li>using stated assumptions and making assumptions and approximations to simplify a real-world situation</li> <li>mapping relationships between important quantities by selecting appropriate tools to create models</li> <li>analyzing relationships mathematically between important quantities to draw conclusions</li> <li>writing a complete, clear and correct</li> </ul>	Devises a plan to apply mathematics in solving problems arising in everyday life, society and the workplace by: <ul style="list-style-type: none"> <li>using stated assumptions and <b>making assumptions</b> and <b>approximations</b> to simplify a real-world situation</li> <li><b>mapping relationships</b> between important quantities by <b>selecting appropriate</b> tools to create models</li> <li>analyzing relationships mathematically between important quantities to draw conclusions</li> <li>writing a <b>complete, clear, and correct</b></li> </ul>	Devises a plan to apply mathematics in solving problems arising in everyday life, society and the workplace by: <ul style="list-style-type: none"> <li>using stated assumptions and approximations to simplify a real-world situation</li> <li><b>illustrating relationships</b> between important quantities by using provided tools to create models</li> <li>analyzing relationships mathematically <b>between important quantities</b> to draw conclusions</li> <li>writing an incomplete algebraic expression or equation to describe a</li> </ul>	Devises a plan to apply mathematics in solving problems arising in everyday life, society and the workplace by: <ul style="list-style-type: none"> <li>using stated assumptions and approximations to simplify a real-world situation</li> <li>identifying important quantities by using provided tools to create models</li> <li>analyzing relationships mathematically to draw conclusions</li> <li>writing an incomplete algebraic expression or equation to describe a situation</li> <li>applying proportional reasoning</li> </ul>

## Performance Level Descriptors – Grade 6 Mathematics

Grade 6 : Sub-Claim D				
The student solves real-world problems with a degree of difficulty appropriate to the grade/course by applying knowledge and skills articulated in the standards for the current grade/course (or for more complex problems, knowledge and skills articulated in the standards for previous grades/courses), engaging particularly in the Modeling practice, and where helpful making sense of problems and persevering to solve them, reasoning abstractly, and quantitatively, using appropriate tools strategically, looking for the making use of structure and/or looking for and expressing regularity in repeated reasoning.				
Level 5: Distinguished Command	Level 4: Strong Command	Level 3: Moderate Command	Level 2: Partial Command	
algebraic expression or equation to describe a situation <ul style="list-style-type: none"> <li>• applying proportional reasoning</li> <li>• writing/using functions to describe how one quantity of interest depends on another</li> <li>• using reasonable estimates of known quantities in a chain of reasoning that yields an estimate of an unknown quantity</li> <li>• reflecting on whether the results make sense</li> <li>• improving the model if it has not served its purpose</li> <li>• interpreting mathematical results in the context of the situation</li> </ul>	algebraic expression or equation to describe a situation <ul style="list-style-type: none"> <li>• applying proportional reasoning</li> <li>• writing/using functions to describe how one quantity of interest depends on another</li> <li>• using reasonable estimates of known quantities in a chain of reasoning that yields an estimate of an unknown quantity</li> <li>• reflecting on whether the results make sense</li> <li>• <b>improving</b> the model if it has not served its purpose</li> <li>• interpreting mathematical results in <b>the context of the situation</b></li> </ul>	situation <ul style="list-style-type: none"> <li>• applying proportional reasoning</li> <li>• <b>writing/using</b> functions to describe how one quantity of interest depends on another</li> <li>• using <b>reasonable</b> estimates of known quantities in a chain of reasoning that yields an estimate of an unknown quantity</li> <li>• <b>reflecting on whether the results make sense</b></li> <li>• <b>modifying the model if it has not served its purpose</b></li> <li>• <b>interpreting mathematical results in a simplified context</b></li> </ul>	<ul style="list-style-type: none"> <li>• using functions to describe how one quantity of interest depends on another</li> <li>• using unreasonable estimates of known quantities in a chain of reasoning that yields an estimate of an unknown quantity</li> </ul>	

## Performance Level Descriptors – Grade 6 Mathematics

Grade 6 : Sub-Claim D				
The student solves real-world problems with a degree of difficulty appropriate to the grade/course by applying knowledge and skills articulated in the standards for the current grade/course (or for more complex problems, knowledge and skills articulated in the standards for previous grades/courses), engaging particularly in the Modeling practice, and where helpful making sense of problems and persevering to solve them, reasoning abstractly, and quantitatively, using appropriate tools strategically, looking for the making use of structure and/or looking for and expressing regularity in repeated reasoning.				
Level 5: Distinguished Command	Level 4: Strong Command	Level 3: Moderate Command	Level 2: Partial Command	
<ul style="list-style-type: none"> <li>• analyzing and/or creating limitations, relationships and interpreting goals within the model</li> <li>• analyzing, justifying and defending models which lead to a conclusion</li> </ul>				

## Performance Level Descriptors – Grade 6 Mathematics

	<b>Grade 6 : Sub-Claim E</b>			
	The student demonstrates fluency in areas set forth in the Standards for Content in grades 3-6.			
	<b>Level 5: Distinguished Command</b>	<b>Level 4: Strong Command</b>	<b>Level 3: Moderate Command</b>	<b>Level 2: Partial Command</b>
<b>Fluency</b>  6.NS.2 6.NS.3-1 6.NS.3-2 6.NS.3-3 6.NS.3-4	Fluently (accurately and in a timely manner) divides multi-digit whole numbers and adds, subtracts, multiplies and divides multi-digit decimals <b>and assesses reasonableness of the result.</b>	<b>Fluently (accurately and in a timely manner)</b> divides multi-digit numbers and adds, subtracts, multiplies and divides multi-digit decimals.	<b>Accurately (but not in a timely manner)</b> divides multi-digit numbers and adds, subtracts, multiplies and divides multi-digit decimals.	With some level of accuracy divides multi-digit numbers and adds, subtracts, multiplies and divides multi-digit decimals