

SBAC Math Claims Overview

Smarter Balanced Assessments are based on claims, or summary statements about what we want students to know and be able to do. There is one overall claim and there are four domain specific claims for each grade, **however**, state testing results will describe the claims in three reporting categories (Claims 2 and 4 are reported together). The domain claims are accompanied by specific targets.

Item Types		Claims for Mathematics Summative Assessment		
DD = drag and drop	EQ = equation	Overall Claim for Grades 3-8: “Students can demonstrate progress toward college and career readiness in mathematics.”		
G = graph	GI = interactive graph	Overall Claim for Grade 11: “Students can demonstrate college and career readiness in mathematics.”		
HS = hot spot	MA =matching tables			
MC = multiple choice, one correct	MS =multiple choice, multiple correct	Claim #1: Concepts & Procedures “Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency.” Note: targets in Claim #1 are the cluster headings for the standards. Refer to full standards. [m] = major standards [a/s] = additional/supporting standards		
ST = short text	TI = fill-in tables	Claim #2: Problem Solving “Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies.”		
		Claim #3: Communicating Reasoning “Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.”		
		Claim #4: Modeling and Data Analysis “Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.”		
Depth of Knowledge Levels		How Claims are Reported on Student Results		
1 = Recall and Reproduction		Claim 1	Claims 2 and 4	Claim 3
2 = Basic Skills and Concepts		Concepts and Procedures Score	Problem Solving/Modeling and Data Analysis Score	Communicating Reasoning Score
3 = Strategic Thinking and Reasoning				
4 = Extended Thinking				

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See the next page(s) for the claims at grade level(s)

Grade 3 SBAC Math Claims

CLAIM #1: Concepts & Procedures [m] = major standards [a/s] = additional/supporting standards	CLAIM #2: Problem Solving	CLAIM #4: Modeling and Data Analysis	CLAIM #3: Communicating Reasoning
Claims 2 and 4 are reported together			
<p>Operations and Algebraic Thinking (3.OA) Target A [m]: Represent and solve problems involving multiplication and division.⁵ (DOK 1) Target B [m]: Understand properties of multiplication and relationship between multiplication and division. (DOK 1) Target C [m]: Multiply and divide within 100. (DOK 1) Target D [m]: Solve problems involving the four operations, and identify and explain patterns in arithmetic. (DOK 2)</p> <p>Number and Operations—Base Ten (3.NBT) Target E [a/s]: Use place value understanding and properties of arithmetic to perform multi-digit arithmetic. (DOK 1)</p> <p>Number and Operations—Fractions (3.NF) Target F [m]: Develop understanding of fractions as numbers. (DOK 1, 2)</p> <p>Measurement and Data (3.MD) Target G [m]: Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. (DOK 1, 2) Target H [a/s]: Represent and interpret data. (DOK 2) Target I [m]: Geometric measurement: understand concepts of area and relate area to multiplication and to addition. (DOK 2) Target J [a/s]: Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. (DOK 1)</p> <p>Geometry (3.G) Target K [a/s]: Reason with shapes and their attributes. (DOK 1, 2)</p>	<p>CLAIM 2 Target A: Apply mathematics to solve well-posed problems in pure mathematics and those arising in everyday life, society, and the workplace. (DOK 2, 3) Target B: Select and use appropriate tools strategically. (DOK 1, 2) Target C: Interpret results in the context of a situation. (DOK 2) Target D: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3)</p> <hr style="width: 20%; margin: 10px auto;"/> <p>CLAIM 4 Target A: Apply mathematics to solve problems arising in everyday life, society, and the workplace. (DOK 2, 3) Target B: Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. (DOK 2, 3, 4) Target C: State logical assumptions being used. (DOK 1, 2) Target D: Interpret results in the context of a situation. (DOK 2, 3) Target E: Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon. (DOK 3, 4) Target F: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3) Target G: Identify, analyze and synthesize relevant external resources to pose or solve problems. (DOK 3, 4)</p>	<p>Target A: Test propositions or conjectures with specific examples. (DOK 2) Target B: Construct, autonomously, 12 chains of reasoning that will justify or refute propositions or conjectures. (DOK 3, 4).¹³ Target C: State logical assumptions being used. (DOK 2, 3) Target D: Use the technique of breaking an argument into cases. (DOK 2, 3) Target E: Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is. (DOK 2, 3, 4) Target F: Base arguments on concrete referents such as objects, drawings, diagrams, and actions. (DOK 2, 3) Target G: At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.) (DOK 3, 4)</p>	

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Grade 4 SBAC Math Claims

CLAIM #1: Concepts & Procedures [m] = major standards [a/s] = additional/supporting standards	CLAIM #2: Problem Solving	CLAIM #4: Modeling and Data Analysis	CLAIM #3: Communicating Reasoning
Claims 2 and 4 are reported together			
<p>Operations and Algebraic Thinking (4.OA) Target A [m]: Use the four operations with whole numbers to solve problems. (DOK 1, 2) Target B [a/s]: Gain familiarity with factors and multiples. (DOK 1) Target C [a/s]: Generate and analyze patterns. (DOK 2, 3)</p> <p>Number and Operations in Base Ten (4.NBT) Target D [m]: Generalize place value understanding for multi-digit whole numbers. (DOK 1, 2) Target E [m]: Use place value understanding and properties of operations to perform multi-digit arithmetic. (DOK 1, 2)</p> <p>Number and Operations – Fractions (4.NF) Target F [m]: Extend understanding of fraction equivalence and ordering. (DOK 1, 2) Target G [m]: Build fractions from unit fractions by applying and extending previous understandings of Target H [m]: Understand decimal notation for fractions, and compare decimal fractions. (DOK 1, 2)</p> <p>Measurement and Data (4.MD) Target I [a/s]: Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. (DOK 1, 2) Target J [a/s]: Represent and interpret data. (DOK 1, 2) Target K [a/s]: Geometric measurement: understand concepts of angle and measure angles. (DOK 1, 2)</p> <p>Geometry (4.G) Target L [a/s]: Draw and identify lines and angles, and classify shapes by properties of their lines and angles. (DOK 1, 2)</p>	<p>CLAIM 2 Target A: Apply mathematics to solve well-posed problems in pure mathematics and those arising in everyday life, society, and the workplace. (DOK 2, 3) Target B: Select and use appropriate tools strategically. (DOK 1, 2) Target C: Interpret results in the context of a situation. (DOK 2) Target D: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3)</p> <hr style="width: 20%; margin: 10px auto;"/> <p>CLAIM 4 Target A: Apply mathematics to solve problems arising in everyday life, society, and the workplace. (DOK 2, 3) Target B: Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. (DOK 2, 3, 4) Target C: State logical assumptions being used. (DOK 1, 2) Target D: Interpret results in the context of a situation. (DOK 2, 3) Target E: Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon. (DOK 3, 4) Target F: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3) Target G: Identify, analyze and synthesize relevant external resources to pose or solve problems. (DOK 3, 4)</p>	<p>Target A: Test propositions or conjectures with specific examples. (DOK 2) Target B: Construct, autonomously, 12 chains of reasoning that will justify or refute propositions or conjectures. (DOK 3, 4).¹³ Target C: State logical assumptions being used. (DOK 2, 3) Target D: Use the technique of breaking an argument into cases. (DOK 2, 3) Target E: Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is. (DOK 2, 3, 4) Target F: Base arguments on concrete referents such as objects, drawings, diagrams, and actions. (DOK 2, 3) Target G: At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.) (DOK 3, 4)</p>	

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Grade 5 SBAC Math Claims

CLAIM #1: Concepts & Procedures [m] = major standards [a/s] = additional/supporting standards	CLAIM #2: Problem Solving	CLAIM #4: Modeling and Data Analysis	CLAIM #3: Communicating Reasoning
Claims 2 and 4 are reported together			
<p>Operations and Algebraic Thinking (5.OA) Target A [a/s]: Write and interpret numerical expressions. (DOK 1) Target B [a/s]: Analyze patterns and relationships. (DOK 2)</p> <p>Number and Operations—Base Ten (5.NBT)) Target C [m]: Understand place value system. (DOK 1, 2) Target D [m]: Perform operations with multi-digit whole numbers and with decimals to hundredths. (DOK 1, 2)</p> <p>Number and Operations—Fractions (5.NF) Target E [m]: Use equivalent fractions as a strategy to add and subtract fractions. (DOK 1, 2) Target F [m]: Apply and extend previous understandings of multiplication and division to multiply and divide fractions. (DOK 1, 2)</p> <p>Measurement and Data (5.MD) Target G [a/s]: Convert like measurement units within a given measurement system. (DOK 1) Target H [a/s]: Represent and interpret data. (DOK 2) Target I [m]: Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. (DOK 1, 2)</p> <p>Geometry (5.G) Target J [a/s]: Graph points on the coordinate plane to solve real-world and mathematical problems. (DOK 1) Target K [a/s]: Classify two-dimensional figures into categories based on their properties. (DOK 2)</p>	<p>CLAIM 2 Target A: Apply mathematics to solve well-posed problems in pure mathematics and those arising in everyday life, society, and the workplace. (DOK 2, 3) Target B: Select and use appropriate tools strategically. (DOK 1, 2) Target C: Interpret results in the context of a situation. (DOK 2) Target D: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3)</p> <hr style="width: 20%; margin: 10px auto;"/> <p>CLAIM 4 Target A: Apply mathematics to solve problems arising in everyday life, society, and the workplace. (DOK 2, 3) Target B: Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. (DOK 2, 3, 4) Target C: State logical assumptions being used. (DOK 1, 2) Target D: Interpret results in the context of a situation. (DOK 2, 3) Target E: Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon. (DOK 3, 4) Target F: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3) Target G: Identify, analyze and synthesize relevant external resources to pose or solve problems. (DOK 3, 4)</p>	<p>Target A: Test propositions or conjectures with specific examples. (DOK 2)</p> <p>Target B: Construct, autonomously, 12 chains of reasoning that will justify or refute propositions or conjectures. (DOK 3, 4).¹³</p> <p>Target C: State logical assumptions being used. (DOK 2, 3)</p> <p>Target D: Use the technique of breaking an argument into cases. (DOK 2, 3)</p> <p>Target E: Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is. (DOK 2, 3, 4)</p> <p>Target F: Base arguments on concrete referents such as objects, drawings, diagrams, and actions. (DOK 2, 3)</p> <p>Target G: At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.) (DOK 3, 4)</p>	

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Grade 6 SBAC Math Claims

CLAIM #1: Concepts & Procedures [m] = major standards [a/s] = additional/supporting standards	CLAIM #2: Problem Solving	CLAIM #4: Modeling and Data Analysis	CLAIM #3: Communicating Reasoning
<p>Ratios and Proportional Relationships (6.RP) Target A [m]: Understand ratio concepts and use ratio reasoning to solve problems. (DOK 1, 2)</p> <p>The Number System (6.NS) Target B [m]: Apply and extend previous understandings of multiplication and division to divide fractions by fractions. (DOK 1, 2) Target C [a/s]: Compute fluently with multi-digit numbers and find common factors and multiples. (DOK 1, 2) Target D [m]: Apply and extend previous understandings of numbers to the system of rational numbers. (DOK 1, 2)</p> <p>Expressions and Equations (6.EE) Target E [m]: Apply and extend previous understandings of arithmetic to algebraic expressions. (DOK 1, 2) Target F [m]: Reason about and solve one-variable equations and inequalities. (DOK 1, 2) Target G [m]: Represent and analyze quantitative relationships between dependent and independent variables. (DOK 2)</p> <p>Geometry (6.G) Target H [a/s]: Solve real-world and math problems involving area, surface area, and volume. (DOK 1, 2)</p> <p>Statistics and Probability (6.SP) Target I [a/s]: Develop understanding of statistical variability. (DOK 2) Target J [a/s]: Summarize and describe distributions. (DOK 1, 2)</p>	Claims 2 and 4 are reported together		<p>Target A: Test propositions or conjectures with specific examples. (DOK 2)</p> <p>Target B: Construct, autonomously, 12 chains of reasoning that will justify or refute propositions or conjectures. (DOK 3, 4).13</p> <p>Target C: State logical assumptions being used. (DOK 2, 3)</p> <p>Target D: Use the technique of breaking an argument into cases. (DOK 2, 3)</p> <p>Target E: Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is. (DOK 2, 3, 4)</p> <p>Target F: Base arguments on concrete referents such as objects, drawings, diagrams, and actions. (DOK 2, 3)</p> <p>Target G: At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.) (DOK 3, 4)</p>
	<p>CLAIM 2 Target A: Apply mathematics to solve well-posed problems in pure mathematics and those arising in everyday life, society, and the workplace. (DOK 2, 3) Target B: Select and use appropriate tools strategically. (DOK 1, 2) Target C: Interpret results in the context of a situation. (DOK 2) Target D: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3)</p> <p style="text-align: center;">—————</p> <p>CLAIM 4 Target A: Apply mathematics to solve problems arising in everyday life, society, and the workplace. (DOK 2, 3) Target B: Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. (DOK 2, 3, 4) Target C: State logical assumptions being used. (DOK 1, 2) Target D: Interpret results in the context of a situation. (DOK 2, 3) Target E: Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon. (DOK 3, 4) Target F: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3) Target G: Identify, analyze and synthesize relevant external resources to pose or solve problems. (DOK 3, 4)</p>		

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Grade 7 SBAC Math Claims

CLAIM #1: Concepts & Procedures [m] = major standards [a/s] = additional/supporting standards	CLAIM #2: Problem Solving	CLAIM #4: Modeling and Data Analysis	CLAIM #3: Communicating Reasoning
<p>Ratios and Proportional Relationships (7.RP) Target A [m]: Analyze proportional relationships and use them to solve real-world and mathematical problems. (DOK 2)</p> <p>The Number System (7.NS) Target B [m]: Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. (DOK 1, 2)</p> <p>Expressions and Equations (7.EE) Target C [m]: Use properties of operations to generate equivalent expressions. (DOK 1, 2)</p> <p>Target D [m]: Solve real-life and mathematical problems using numerical and algebraic expressions and equations. (DOK 1, 2)</p> <p>Geometry (7.G) Target E [a/s]: Draw, construct and describe geometrical figures and describe the relationships between them. (DOK 1, 2)</p> <p>Target F [a/s]: Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. (DOK 1, 2)</p> <p>Statistics and Probability (7.SP) Target G [a/s]: Use random sampling to draw inferences about a population. (DOK 1, 2)</p> <p>Target H [a/s]: Draw informal comparative inferences about two populations. (DOK 2)</p> <p>Target I [a/s]: Investigate chance processes and develop, use, and evaluate probability models. (DOK 1, 2)</p>	Claims 2 and 4 are reported together		<p>Target A: Test propositions or conjectures with specific examples. (DOK 2)</p> <p>Target B: Construct, autonomously, 12 chains of reasoning that will justify or refute propositions or conjectures. (DOK 3, 4).¹³</p> <p>Target C: State logical assumptions being used. (DOK 2, 3)</p> <p>Target D: Use the technique of breaking an argument into cases. (DOK 2, 3)</p> <p>Target E: Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is. (DOK 2, 3, 4)</p> <p>Target F: Base arguments on concrete referents such as objects, drawings, diagrams, and actions. (DOK 2, 3)</p> <p>Target G: At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.) (DOK 3, 4)</p>
	<p>CLAIM 2 Target A: Apply mathematics to solve well-posed problems in pure mathematics and those arising in everyday life, society, and the workplace. (DOK 2, 3)</p> <p>Target B: Select and use appropriate tools strategically. (DOK 1, 2)</p> <p>Target C: Interpret results in the context of a situation. (DOK 2)</p> <p>Target D: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3)</p> <hr style="width: 20%; margin: 10px auto;"/> <p>CLAIM 4 Target A: Apply mathematics to solve problems arising in everyday life, society, and the workplace. (DOK 2, 3)</p> <p>Target B: Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. (DOK 2, 3, 4)</p> <p>Target C: State logical assumptions being used. (DOK 1, 2)</p> <p>Target D: Interpret results in the context of a situation. (DOK 2, 3)</p> <p>Target E: Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon. (DOK 3, 4)</p> <p>Target F: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3)</p> <p>Target G: Identify, analyze and synthesize relevant external resources to pose or solve problems. (DOK 3, 4)</p>		

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Grade 8 SBAC Math Claims

CLAIM #1: Concepts & Procedures [m] = major standards [a/s] = additional/supporting standards	CLAIM #2: Problem Solving	CLAIM #4: Modeling and Data Analysis	CLAIM #3: Communicating Reasoning
<p>The Number System (8.NS) Target A [a/s]: Know that there are numbers that are not rational, and approximate them by rational numbers. (DOK 1, 2)</p> <p>Expressions and Equations (8.EE) Target B [m]: Work with radicals and integer exponents. (DOK 1)</p> <p>Target C [m] Understand the connections between proportional relationships, lines, and linear equations. (DOK 1, 2)</p> <p>Target D [m]: Analyze and solve linear equations and pairs of simultaneous linear equations. (DOK 1, 2)</p> <p>Functions</p> <p>Target E [m]: Define, evaluate, and compare functions. (DOK 1, 2)</p> <p>Target F [m]: Use functions to model relationships between quantities. (DOK 1, 2)</p> <p>Geometry (8.G) Target G [m]: Understand congruence and similarity using physical models, transparencies, or geometry software. (DOK 1, 2)</p> <p>Target H [m]: Understand and apply the Pythagorean theorem. (DOK 2)</p> <p>Target I [a/s]: Solve real-world and mathematical problems involving volume of cylinders, cones and spheres. (DOK 2)</p> <p>Statistics and Probability (8.SP) Target J [a/s]: Investigate patterns of association in bivariate data. (DOK 1, 2)</p>	<p>Claims 2 and 4 are reported together</p>		<p>Target A: Test propositions or conjectures with specific examples. (DOK 2)</p> <p>Target B: Construct, autonomously, 12 chains of reasoning that will justify or refute propositions or conjectures. (DOK 3, 4).¹³</p> <p>Target C: State logical assumptions being used. (DOK 2, 3)</p> <p>Target D: Use the technique of breaking an argument into cases. (DOK 2, 3)</p> <p>Target E: Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is. (DOK 2, 3, 4)</p> <p>Target F: Base arguments on concrete referents such as objects, drawings, diagrams, and actions. (DOK 2, 3)</p> <p>Target G: At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.) (DOK 3, 4)</p>
	<p>CLAIM 2 Target A: Apply mathematics to solve well-posed problems in pure mathematics and those arising in everyday life, society, and the workplace. (DOK 2, 3)</p> <p>Target B: Select and use appropriate tools strategically. (DOK 1, 2)</p> <p>Target C: Interpret results in the context of a situation. (DOK 2)</p> <p>Target D: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3)</p> <hr style="width: 20%; margin: 10px auto;"/> <p>CLAIM 4 Target A: Apply mathematics to solve problems arising in everyday life, society, and the workplace. (DOK 2, 3)</p> <p>Target B: Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. (DOK 2, 3, 4)</p> <p>Target C: State logical assumptions being used. (DOK 1, 2)</p> <p>Target D: Interpret results in the context of a situation. (DOK 2, 3)</p> <p>Target E: Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon. (DOK 3, 4)</p> <p>Target F: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3)</p> <p>Target G: Identify, analyze and synthesize relevant external resources to pose or solve problems. (DOK 3, 4)</p>		

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Grade 11 SBAC Math Claims

CLAIM #1: Concepts & Procedures [m] = major standards [a/s] = additional/supporting standards	CLAIM #2: Problem Solving	CLAIM #4: Modeling and Data Analysis	CLAIM #3: Communicating Reasoning
<p>Number and Quantity (9-12.N)</p> <p>Target A [a/s]: Extend the properties of exponents to rational exponents. (DOK 1, 2)</p> <p>Target B [a/s]: Use properties of rational/ irrational numbers. (DOK 1, 2)</p> <p>Target C [m]: Reason quantitatively and use units to solve problems. (DOK 1, 2)</p> <p>Algebra (9-12.A)</p> <p>Target D [m]: Interpret the structure of expressions. (DOK 1)</p> <p>Target E [m]: Write expressions in equivalent forms to solve problems. (DOK 1, 2)</p> <p>Target F [a/s]: Perform arithmetic operations on polynomials. (DOK 1)</p> <p>Target G [a/s]: Create equations that describe numbers or relationships. (DOK 1, 2)</p> <p>Target H [m]: Understand solving equations as a process of reasoning and explain the reasoning. (DOK 1, 2)</p> <p>Target I [m]: Solve equations/ inequalities in one variable. (DOK 1, 2)</p> <p>Target J [m]: Represent and solve equations and inequalities graphically. (DOK 1, 2)</p> <p>Functions (9-12.F)</p> <p>Target K [m]: Understand functions and use function notation. (DOK 1)</p> <p>Target L [m]: Interpret functions that arise in applications in terms of a context. (DOK 1, 2)</p> <p>Target M [m]: Analyze functions using different representations. (DOK 1, 2, 3)</p> <p>Target N [m]: Build a function that models a relationship between two quantities. (DOK 1, 2)</p> <p>Geometry (9-12.G)</p> <p>Target O: Define trigonometric ratios and solve problems involving right triangles (DOK 1, 2)</p> <p>Statistics and Probability (9-12.SP)</p> <p>Target P [m]: Summarize, represent and interpret data on a single count or measurement variable. (DOK 2)</p>	<p>Claims 2 and 4 are reported together</p>		<p>Target A: Test propositions or conjectures with specific examples. (DOK 2)</p> <p>Target B: Construct, autonomously, 12 chains of reasoning that will justify or refute propositions or conjectures. (DOK 3, 4).13</p> <p>Target C: State logical assumptions being used. (DOK 2, 3)</p> <p>Target D: Use the technique of breaking an argument into cases. (DOK 2, 3)</p> <p>Target E: Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is. (DOK 2, 3, 4)</p> <p>Target F: Base arguments on concrete referents such as objects, drawings, diagrams, and actions. (DOK 2, 3)</p> <p>Target G: At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.) (DOK 3, 4)</p>
	<p>CLAIM 2</p> <p>Target A: Apply mathematics to solve well-posed problems in pure mathematics and those arising in everyday life, society, and the workplace. (DOK 2, 3)</p> <p>Target B: Select and use appropriate tools strategically. (DOK 1, 2)</p> <p>Target C: Interpret results in the context of a situation. (DOK 2)</p> <p>Target D: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3)</p> <p style="text-align: center;">-----</p> <p>CLAIM 4</p> <p>Target A: Apply mathematics to solve problems arising in everyday life, society, and the workplace. (DOK 2, 3)</p> <p>Target B: Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. (DOK 2, 3, 4)</p> <p>Target C: State logical assumptions being used. (DOK 1, 2)</p> <p>Target D: Interpret results in the context of a situation. (DOK 2, 3)</p> <p>Target E: Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon. (DOK 3, 4)</p> <p>Target F: Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas). (DOK 1, 2, 3)</p> <p>Target G: Identify, analyze and synthesize relevant external resources to pose or solve problems. (DOK 3, 4)</p>		

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