California CAASPP/SBAC Assessment

Grade 11 Mathematics

Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency. CLAIM.1

- **A** Extend the properties of exponents to rational exponents CLAIM.1.A
- **B** Use properties of rational and irrational numbers CLAIM.1.B
- **C** Reason quantitatively and use units to solve problems CLAIM.1.C
- **D** Interpret the structure of expressions CLAIM.1.D
- **E** Write expressions in equivalent form to solve problems CLAIM.1.E
- **F** Perform arithmetic operations on polynomials CLAIM.1.F
- **G** Create equations that describe numbers or relationships CLAIM.1.G
- **H** Understanding solving equations as a process of reasoning and explain the reasoning (rational & radical) CLAIM.1.H
- **I** Solve equations and inequalities in one variable CLAIM.1.I
- **J** Represent and solve equations and inequalities graphically CLAIM.1.J
- **K** Understand the concept of a function and use function notation CLAIM.1.K
- **L** Interpret functions that arise in applications in terms of a context CLAIM.1.L
- **M** Analyze functions using different representations CLAIM.1.M
- **N** Build a function that models a relationship between two quantities CLAIM.1.N
- **O** Define trigonometric ratios and solve problems involving right triangles CLAIM.1.O
- **P** Summarize, represent, and interpret data on a single count or measurement variable CLAIM.1.P

Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem

- **A** Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. CLAIM.2.A
- **B** Select and use appropriate tools strategically. CLAIM.2.B
- **C** Interpret results in the context of a situation. CLAIM.2.C

solving strategies. CLAIM.2	D Identify important quantities in a practical situation and map their relationship (e.g., using diagrams, two way tables, graphs, flowcharts, or formulas). CLAIM.2.D
Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others CLAIM.3	A Test propositions or conjectures with specific examples. CLAIM.3.A
	B Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. CLAIM.3.B
	C State logical assumptions being used. CLAIM.3.C
	D Use the technique of breaking an argument into cases. CLAIM.3.D
	E Distinguish correct logic or reasoning from that which is flawed, and if there is a flaw in the argument, explain what it is. CLAIM.3.E
	F Base arguments on concrete referents such as objects, drawings, diagrams, or actions. CLAIM.3.F
	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.) CLAIM.3.G
Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems. CLAIM.4	A Apply mathematics to solve problems arising in everyday life, society, and the workplace. CLAIM.4.A
	C State logical assumptions being used. CLAIM.4.C
	B Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem. CLAIM.4.B
	D Interpret results in the context of a situation CLAIM.4.D
	E Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon. CLAIM.4.E
	F Identify important quantities in a practical situation and map their relationship (e.g.using diagrams, two way tables, graphs, flowcharts, or formulas) CLAIM.4.F
	G Identify, analyze, and synthesize relevant external resources to pose or solve problems (Measured in PT only) CLAIM.4.G