

**COMPARISON AT A GLANCE:
How do the Math CCSS compare to the former state standards?**

Topic	Previous Standards	CCSS
Content	<p>*Virtually all of California’s former math standards are embedded within the CCSS – the major difference is that they are now found at grade levels that reflect a research-based coherence across grade levels K-8 and course levels in high school.</p> <ul style="list-style-type: none"> • Reflected a mile-wide-inch deep approach to topics covered in the curriculum. • Isolated standards taught to mastery. • Strands spiraled across grade levels without attention to mastery. • Focus on following a single procedure to arrive at a given answer. 	<ul style="list-style-type: none"> • Fewer topics allow teachers to go deeply into content areas that require more time so teachers can go deeply into areas that require higher cognitive demand. • Concepts and domains are taught to mastery. • They provide a better foundation for practical applications by building coherent progressions that transition students from “doing the math” to “using the math.” • Students will need to accurately calculate using equations, understand concepts not just memorize answers and formulas. • Focus and Coherence – There will be a focus on key topics at each grade level as well as coherent progressions across grade levels. • Balanced approach – Standards require an emphasis on procedural fluency, conceptual understanding and application with problem solving.
Organization	<ul style="list-style-type: none"> • K-7 grade level standards. • 8-12 course level standards. • Key standards became the primary target areas with a focus on procedural mathematics as tested on CST assessment. 	<p>Standards for Mathematical Content</p> <ul style="list-style-type: none"> • K-8 grade level standards. • High school standards by course: integrated or traditional pathways are outlined in Appendix A in California Framework. <p>Standards for Mathematical Practice</p> <ul style="list-style-type: none"> • 8 standards consistent across all grade levels • Describe the habits of mind of a mathematical proficient student, or ways with which a student interacts, with the content standards.
Instruction	<ul style="list-style-type: none"> • Previous instruction encouraged a procedural- focused and teacher-centered delivery model: <ul style="list-style-type: none"> ○ An explicitly communicated learning objective ○ Teacher modeling ○ Guided student practice ○ Independent practice ○ Outcome-based assessments • Direct instruction of the algorithm without conceptual understanding or connections. • Fluency was practiced and mastery was done as isolated unconnected events (math facts without conceptual understanding). 	<ul style="list-style-type: none"> • Student thinking centered classrooms. • Math CCSS requires greater focus and time committed to math instruction by teachers and deeper knowledge by students. • Standards for mathematical practices require students not only to understand the mathematics they do, but to use mathematics to problem solve and communicate their reasoning to others. • Fluency with the standard algorithm is developed only after conceptual understanding has been fully attained. • Perseverance – intentional or engineered struggle.