



## Top Ten List About Algebra

### *Questions Every Parent Should Ask*



**P**arents and other adults have significant and wide-ranging influence over children's attitudes, behavior, and expectations for success. This document is intended to begin a conversation about the importance of learning algebra.

#### 1. What is algebra?

Algebra is a branch of mathematics that uses symbols and generalizations to solve problems. Algebra has become the language of opportunity in the 21<sup>st</sup> Century.

#### 2. Why should my child take mathematics beyond arithmetic?

During the next decade, nearly 80% of U.S. job opening will require some type of post-secondary education or training, which requires at least algebra as a precondition to enrollment.

#### 3. Why is it important for my child to take algebra in middle and/or high school?

Algebra I is often referred to as a "gateway" course because a deep understanding is needed for success in more advanced mathematics, science, technology, and social studies courses in high school and beyond.

#### 4. How can I be sure that my child is ready for algebra?

Before students can succeed in Algebra I, they need to have the key "readiness" skills. For example, they need fluency with whole numbers and fractions, and particular aspects of geometry and measurement. Talk with your child's teachers to learn more.

#### 5. My child struggles now with math, maybe he/she can't do algebra?

All children can learn algebra! Most students' academic performance will rise or fall to the level of the expectations of those around them, especially their parents and their teachers.

#### 6. Can algebra help my child in subjects other than mathematics?

Algebra helps students organize their thinking, making it easier for them to craft reasonable responses when confronted with complicated or changing situations.

#### 7. My child doesn't want to go to college so why should he or she take algebra?

Algebra's problem-solving and critical-thinking skills can help students even if they do not go to college or pursue career in a STEM (science, technology, engineering or mathematics) field. Applicants of many trade apprenticeships must pass at least Algebra I to enter the program and some private occupational schools require a math entrance test that includes algebra. Military services require a mathematics test that includes algebra to enlist.

#### 8. Why did the CT State Department of Education (CSDE) develop the Connecticut Common Core State Standards Algebra I course?

Many existing Algebra I courses cover too many topics, go into too little depth, limit the use of technology, and serve far too few students with learning activities that are based on real world examples.

#### 9. How is the Connecticut Common Core State Standards Algebra I different from the Algebra I course our school district may offer now?

It engages students in fewer topics, while going deeper into problem-based, technology-supported lessons that use real world problems.

#### 10. Schools and teachers are responsible for educating my children, what role do I have?

Research confirms that children achieve greater success as learners when parents play an active role, regardless of socioeconomic status, ethnic/racial background, or the parents' own level of education.