

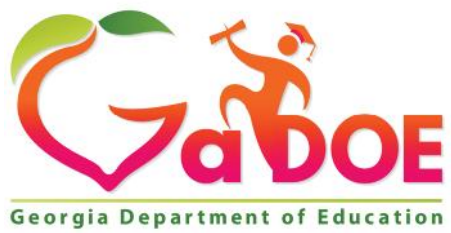
*Richard Woods, Georgia's School Superintendent*  
*"Educating Georgia's Future"*

## Foundations of Algebra Standards Survey Rating and Comments

**Please indicate your level of agreement with the following statements about the Foundations of Algebra Standards.**

### The DRAFT Foundations of Algebra Standards:

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	# of Responses
are clear and understandable	29.6% 76	59.5% 153	7.4% 19	1.9% 5	1.6% 4	257
define what students should know and be able to do to prepare them for success in required high school mathematics courses	32.0% 82	55.9% 143	6.6% 17	3.1% 8	2.3% 6	256
are appropriate for the next level or grade in preparation for college and career readiness	31.6% 81	52.0% 133	6.6% 17	5.5% 14	4.3% 11	256
are rigorous enough to challenge learners	33.6% 86	54.3% 139	5.9% 15	3.9% 10	2.3% 6	256
provide sufficient opportunity to revisit and enhance student understanding of foundational algebra concepts	36.2% 92	50.4% 128	6.7% 17	3.9% 10	2.8% 7	254
are consistent with postsecondary and business/industry standards	26.7% 68	54.1% 138	8.2% 21	4.3% 11	6.7% 17	255



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**Please enter any additional comments you would like to make concerning the DRAFT Foundations of Algebra Standards.**

**Comments:**

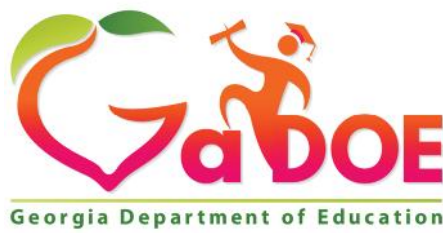
Algebra has been taught for decades. I hope these standards are the most logical in sequence and someone compared them to many other schools' Algebra curriculum! Why reinvent a course that should be standardized? Better yet, find a good text book about Algebra and copy the book's (and math experts) sequence of learning objectives and teach that! Please provide these books for our students in Fulton County!

Are these standards actually aligned with college standards? As an educator, who graduated in 2007, I would have to question these standards as not really aligning with college and too rigorous for preparing students.

As a HS Math teacher, this change is MUCH needed. Students need a stronger base on which to build their HS math skills. I believe this is a good start to changing what has been so wrong with HS mathematics. I have been extremely discouraged as a mathematics educator. Since I began teaching in 2009, the math curriculum in HS has changed EVERY year and is continuing to do so. This is completely unacceptable for our students and extremely frustrating to teachers!

As a parent of a struggling learner, I am very concerned that this class would lead to him being tracked onto a lower academic track with the potential to impact his ability to complete the required four years of mathematics courses. This could have an impact on his ability to attend certain colleges in the state. I understand he might be able to double up on math courses during his senior year, but as a struggling learner I do not feel that may be a viable option for him with the large number of required courses in high school. It seems unusual to me that the Foundations course contains so many elementary school mathematics standards from grades 3,4, & 5. It would seem to make more sense to identify the areas in which students are struggling in the lower grades. Remediation plans should be developed each year. I would also think that if a large number of students are struggling in a known number of standards that increasing teacher professional development opportunities for teachers would be essential. Teachers need access to the best practices needed to teach and remediate standards. My recommendation is to look more closely at why students aren't mastering the standards in the lower grades instead of enrolling kids in a course that could impact their college enrollment. Tracking kids into a class with a focus on lower expectations does NOT seem like a good choice if we are trying to give kids the skills of being successful in their future.

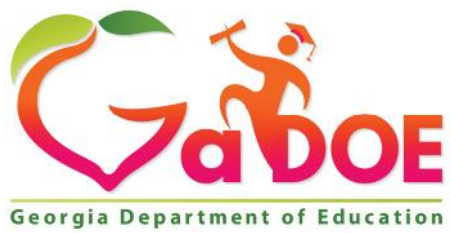
As a parent of high school students, I have seen them struggling in Math since they started high school. Whatever changes that are trying to be made it need to be where it is taught with understanding so the students can grasp it and be successful in passing all of the Math classes they need while in high school.



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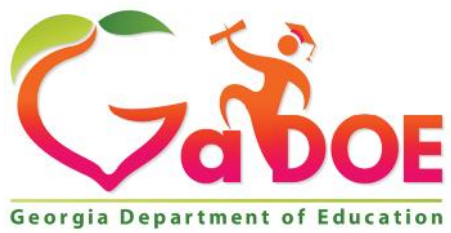
As a SPED teacher of 6th graders, I am glad to see some attention being paid to the needs/support of students who are truly learning below grade level. Much attention has been given to students who can advance in the new "Continuous Achievement" model, yet it seemed that no one wanted to admit that many other students are, in fact, below grade level in their abilities and need instruction to meet them where they are, in order to help them move forward. Thank you!
As long as the standards match what the students will be asked in college, then they are fine.
Can students fail this course?
Courses in Georgia continue to be drafted and implemented for remediation purposes. Has anyone studied the number of remedial courses offered at 2-year colleges? This semester I'm teaching Geometry A to a class of 32 students, more than half have failed this course at least once. Two seniors are enrolled. Students taking the course for the first time failed the prerequisite course at least once. What's wrong with this picture? I don't see the math difficulties that were addressed years ago improving...is anyone taking my concerns and comments seriously?
Courses in Georgia continue to be drafted and implemented for remediation purposes. Has anyone studied the number of remedial courses offered at 2-year colleges? This semester I'm teaching Geometry A to a class of 32 students, more than half have failed this course at least once. Two seniors are enrolled. Students taking the course for the first time failed the prerequisite course at least once. What's wrong with this picture? I don't see the math difficulties that were addressed years ago improving...is anyone taking my concerns and comments seriously?
Currently, I feel okay with the standard for Foundations of Algebra. My further understanding of the standards and my ability to teach them in a realistic time frame will be determined in the years following their implementation.
Does this course grant credit to a College Prep diploma?
Excellent plan for students who come to high school who are not prepared for high school math.
Factoring quadratics is a high level skill! I teach Accelerated Analytic Geometry and that test had the lowest average of the year! This is also an area of concern for the Accelerated pre-calculus teacher at our school and she included factoring as warm ups on a regular basis. For us to include this in Algebra I, they need to be factorable and "a" must equal 1 for this level. Reserve the a not = to 1 for Algebra II and using the quadratic formula for Algebra II since that is when they will be covering complex numbers anyway. With that said, the sequence section leads to growth and decay problems that have always been a part of the Algebra II curriculum, and should be moved back in order to give Algebra I teachers the time to tackle graphing parabolas. I started teaching 25 years ago. And I can't believe the failure rate we already have with the standards that are twisted and broken into such pieces and scattered among the grades. There are reasons that higher order thinking skills were reserved for algebra II and not included in algebra I. The brain must mature enough for these topics. PLEASE consider the above standard changes and lets encourage our students to not give up on school in their 9th grade year because of the outrageous math curriculum!



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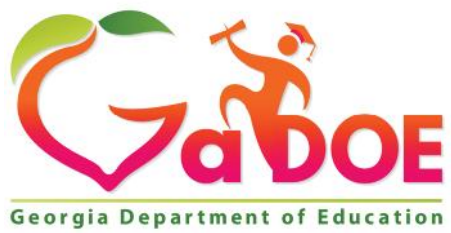
Focus should be placed on connecting the concept that fractions (rational numbers) are division problems and vice-versa. In addition, the curriculum should include an intensive reading and vocabulary component to assist secondary and post secondary teachers with grade level instruction and students with the reading levels of resources and materials.
For senior year, I would like to see an option to take Money Management (personal and business aspects) in lieu of Advanced Algebra. Students who are not college bound will benefit from the money management more than advanced algebra.
Foundations of Algebra is a much needed course. If our students obtain strong foundational skills they will be more successful in Algebra and Geometry. Please consider Foundations of Algebra as 1 full math credit instead of an elective credit. I believe that a student that starts with Foundations of Algebra and ends with Adv. Algebra (giving him or her 4 full math credits) will have sufficient mathematical knowledge to be successful in a four-year college or university.
Foundations of algebra would be great for our incoming 9th grade students with low test scores. These students come to use from middle school lacking basic skills. We have to spend so much time reviewing prior knowledge it takes time away from us teaching the content. The foundations of algebra would be a nice addition to our 9th grade academy, to help guide students in the direction that they need to be.
Functions are an unnecessary component of the course. If functions were to be included the standard should be focused on exposing the students the different kinds of functions, than asking them to be write functions in function notation, etc.
Get back to the BASICS and everything else will fall into place!
Great idea. Wish we would have introduced this course prior to now. . .
High schools are in DESPERATE need of a 9th grade "pre-algebra" course for all middle school students who did not pass middle school math, or the CRCT in math, or took the modified CRCT. These students do NOT have the skills to be successful in 9th Algebra!!
I am concerned that for the ability level of the students enrolled in this course, based on the state recommendations, that students will not be able to master the amount of content proposed in the standards for Foundations of Algebra and be ready to successfully move onto Algebra I/Coordinate Algebra the next year.
I am concerned that High School teachers will be teaching standards from grades 3-8, and they should be teaching it concretely, pictorially as well as algorithmically. Are the HS teachers qualified to teach these concepts in the manner that they need to be taught? What actions will be taken to make sure they are prepared?
I am glad this option will be available.
I am thrilled to see a beginning high school math course that provides an opportunity for students to learn arithmetic with fractions and decimals. The pre-algebra concepts and skills are essential to success in college algebra and any math course that follows. There are too many standards, and I would recommend cutting the more advanced algebra
topics. Solving one-step equations should be the most advanced thing covered in this course. Leave the linear equations and functions standards to Algebra 1.
I believe this course is absolutely necessary to ensure that our lower level students are set up for success.



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I believe this is an excellent opportunity for students who struggled with algebraic concepts from 5th grade up through 8th grade to have an opportunity to catch up and fill in any gaps that may be causing them to struggle mathematically before pushing harder math in high school courses.
I do believe this is the beginning of taking the right step to bridge the knowledge deficit that some of our students possess with respect to mathematics.
I don't recall seeing a statement in the draft the Foundations of Algebra Standards prepare students for college/career readiness.
I feel like this course needs to be offered in the 8th grade prior to entering high school. If students have not done well on mathematics standardized tests in 5th, 6th, and 7th grade then 8th grade should be used to work on remediation not sending students to high school to remediate middle school standards.
I feel that this class would be a great fit for struggling math students. So many of the students that I teach are not college prep students so this would be a much better fit for their educational needs.
I feel the qualifications for the course are too restrictive.
I firmly believe that this course is needed for our 9th grades who struggle with gaps in their math reasoning skills. This course would give the appropriate students a much-needed remediation and a chance at success.
I firmly believe the Foundations of Algebra course should not be offered for the following reasons: - Limits students' opportunities for post-secondary education - high school teachers are not equipped to teach elementary and middle school math standards conceptually - this course does not provide just-in-time remediation; rather, attempts to remediate all in one course rather than throughout elementary and middle grades which should be done - There will be a very negative stigma associated with placing students in this course - course standards communicate low expectations and WILL NOT prepare students for Coordinate Algebra - students will be one year removed from 8th grade math standards which are truly foundational to the Coordinate Algebra course - creating a course designed for a homogeneous group of low achievers is NEVER a good idea -the course encourages low self-efficacy. In conclusion, we need to focus our efforts on training teachers to effectively understand and teach our standards. Additionally, rather than creating this course, we should build a curriculum for Coordinate Algebra and Analytic Geometry support so that teachers know what should be done in those courses to support the on-grade level content.
I haven't had an opportunity to review the algebra standards. I'm currently a seventh grade special education teacher.
I like the idea of having a foundational course. However, the standards should be connect more to Coordinate Algebra. Too many middle school standards are in this course.
I like the mix of 6th, 7th and 8th grade standards. It reminds me of Pre-Algebra.
I like this course to prepare students for Coordinate Algebra.
I love this addition. I believe that the class will benefit all the students who are struggling with the basics.
I LOVE this class! I think this is exactly what we've needed for years to "fill the gaps" with our learners!! I'd LOVE to teach this course!



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I seem we agreement has been reached that middle and elementary math teachers are unable to do their jobs

I think that these standards are exactly what struggling students need to be successful in the upcoming Math Sequence Courses.

I think that this course will help many students in my school district.

I think the qualifications for the course should be broadened to include students that are "bubble students".

I think the qualifications for this course need to be broader and to include the lower 10% of all students.

I think the standards for this course are appropriate for the lowest achieving students.

I think the standards need to be a bit more specific. For example, the section on functions, which functions are you going to include? I wouldn't include this section with the foundations class. MCC9 -12.F.IF.4.7 Analyze graphs of functions for key features-- Intercepts, Intervals for Increase/decrease, maximum/minimum, symmetries, end behavior

I think there needs to be just a little bit more in this course to prepare for Algebra, but completely in favor of the course.

I think this is an awesome addition to the curriculum especially for the students who are placed and ESP students or the ones who struggle with the foundations. The students who need this I do not believe will be able to make it through a senior mathematics class nonetheless. This is the BEST option!

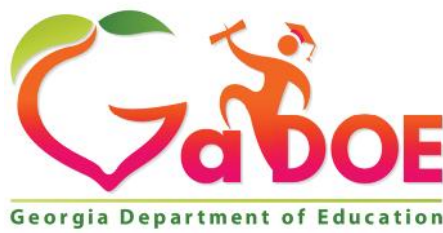
I think we need to stick with what has worked in the past.

I truly believe that we are limiting this foundations of algebra class to students who obviously desperately need it (special needs students), but there are many more grade 9 students who need this remedial style course as well, maybe even as high as 50% of the grade 9 class at any particular school.

I understand that this course is a precursor to Coordinate Algebra, but there are still a few standards that I feel should be held off until they take Coordinate Algebra. A couple of examples are rearranging formulas from the AEI standards and from the AQR standards, key features of functions. This class would be a great opportunity to make sure that students are truly comfortable with algebra. I teach students now that still cannot remember how to solve a two-step equation and cannot subtract integers.

I would just like to say that I support the effort to provide a class to incoming freshmen that will strengthen their math understanding prior to them taking Coordinate Algebra if they struggle in math.

I would like the standards to address how to deal with students who have deficits in basic math skills such as multiplication and division. Also, if the whole class fails a unit, what happens? Currently, the teacher offers a recovery process after the unit test. She teaches nothing. She just let's them learn how to cheat by taking and retaking an online assessment up to five times. Their grade can be raised in her grade book by learning the process of elimination in the recovery process, but none of the class learned the concepts in the unit.



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I would love to have this course added to the high school curriculum. So many of my students have aged out of middle school and come to high school never passing a single math class. This gives students a fighting chance to pass math and finally see some positive feedback in math. I really am excited that you have heard our concerns and are trying to implement this course!

I would suggest there be opportunity for an additional pathway for the same students who are described in this draft, as the student ideal who would benefit from this course. We need students to leave us and post high school, be able to manage their own life in as many aspects as possible.

I'm only filling this out in one of the surveys because my comments apply to all. This is not what math teachers want, it is not what students want. This is just some other thing that someone has come up with to say that they are "trying to fix the problem." Go back to Algebra 1, Geometry, Algebra II, and Adv/Alg Trig. Use those course names as a starting point and put the standards where they should go. If you want to make people happy give them what they want. This version of discrete still isn't discrete and removes a complete level of rigor if a school system chooses. Taking all 4 of one is not equivalent of taking all 4 of the other, I and that is a problem.

If I read the criteria for Eligibility for the Foundations of Algebra Standards, students will have to be at a FOURTH grade mathematics level to be eligible for the course. One standard says "Use properties of integer exponents to find equivalent numerical expressions." Integers are not introduced until 6th grade under CCGPS. How is a teacher supposed to take a student with 4th grade math skills and move them to 9th grade (Algebra I) in one course? The student who meets the requirements for the Foundations course will most likely be a student with disabilities, an English Learner or on Tier 3 of RTI. A classroom of such struggling learners should have class limits and additional support required. Those students will have no one to have as an example and what recipe for disaster. A group of all remedial students is incredibly difficult to instruct much less all remedial, SWD and ELL. The ominous language of the tracking of these students makes a teacher very hesitant to volunteer to teach this course. How can we expect our best teachers to work with our lowest students if we are going to hold them to undescribed standards of progress? This group of students would need the most innovative and experienced teacher in a school.

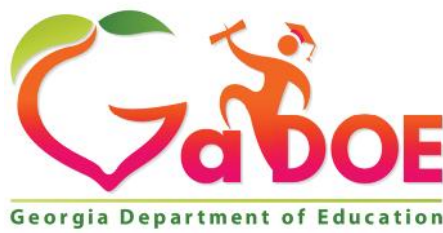
In my opinion, it's very important to get back to math basics and learning how to compute with a calculator.

In the standard for Pythagorean Theorem, remove the stipulation to focus only on solving for the hypotenuse; with emphasis on solving in the Foundations class, students should be expected to solve for missing side lengths as well.

Irrational numbers do not belong here to me. This is a foundations class and I think if this class is designed to use manipulatives and real world learning, irrational numbers can wait until Algebra I. Let's lay the foundation.

Is this going to count for one of their math courses?

It is about time we accommodate all learners.

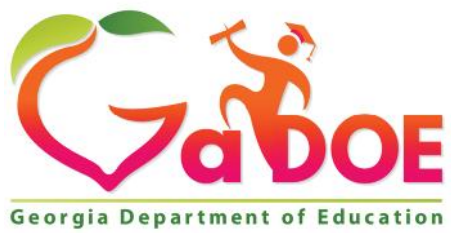


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<p>It is important that these standards stress practice with 1) word problems, 2) percentages, and 3) application problems. The difference between rational and irrational numbers is not crucial to their understanding of mathematics, and should not be included. All standards should be based on concrete application, not abstract knowledge. They should reinforce how to use a concept, not why they are using it. Graphing systems of inequalities should not be included because they have not learned how to graph inequalities yet.</p>
<p>It would be nice to have a class like this at the 6th grade level as well to close in on some of the major computation and number sense gaps from elementary school. If this is only a semester long course, I fear that students may not get enough time to cover all the necessary standards.</p>
<p>Make sure that all the options for special education are clear for all levels.</p>
<p>Make sure that Special Education students at every high school level have options.</p>
<p>Many of my on level 9th grade students do not have the basic math skills to be successful in Coordinate Algebra. I am thrilled that these students will have an alternative class that allows them time to solidify prerequisite math skills.</p>
<p>Many of the standards a very elementary for high school students so the pacing guide for these should group them together so there is not a lot of time spent on the 3rd, 4th, and 5th grade standards, but more on the standards that will benefit them being successful in algebra.</p>
<p>Mastery of topic must be met by practice. Once mastery is met then explanations follow.</p>
<p>More hands - on - Activities are better.</p>
<p>My comment that would continue in all four of the options simply questions, movement from students between the foundations-<i>alg-geo-advancedAlge...</i> once they begin in this direction, I assume that they will remain in this 'style grouping' their entire 4 yrs, or is the advanced algebra 'mixed' (junior/seniors)</p>
<p>Need clear directives as to how students qualify to take this course.</p>
<p>Need more time to discuss elements with fellow teachers. There are some questions remaining.</p>
<p>No! No! No! No! No! This course does NOT need to exist. Standards were raised significantly when Math 1-4 rolled in, and this is a huge step backwards. The bottom 10% of students today know a *LOT* more than the bottom 10% did back in the "Fundamentals of Algebra" and "Concepts of Algebra" days.</p>
<p>Opportunities for post-secondary education will be limited since many if not most of the students will not have a course beyond the junior course. - 9th grade struggling students will not be motivated by the elementary standards. - Placing students in a class with elementary standards communicates low expectations leading to low self-efficacy. - "Just in time" remediation should be provided beginning in 3rd grade where some of the standards originate so students won't fall behind and the necessary skills can be developed in the appropriate grade level. - Waiting 3 – 6 years to develop the conceptual understanding of grade-level content is not appropriate.</p>





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Overall, the standards look great. We, as teachers, however, need more direction. We need to know what the Power Standards are so we can better aim our focus when teaching the standards to students. I think it is phenomenal to see application problems in this set. We definitely need an emphasis, if not more than are listed in these standards on word problems, percent problems, and application problems. We should remove the more abstract standards, such as the one that has students understand irrational numbers approximated with rational ones. Instead, focus more on standards that students will need to know in the real world rather than random abstract ideas. A good understanding of numbers is good, but focus on the more important application of numbers, such as percentages, rather than one they'll never have to use outside of school. We need a standard that has students writing equations of lines and more graphing lines. This is taught in the 8th grade, but students are so weak in this area that it definitely needs reinforcement in this class. Remove the standard about graphing systems of inequalities. Systems of lines is fine, but we need to have them graphing one two-variable inequality first, so have that be the standard in Foundations and leave systems to 9th grade Algebra. Characteristics of functions is great, as long as the standard remains as IN CONTEXT. This is a real-world application and a much more tangible concept for students, so it is spectacular to be the lesson taught in this course. Lastly, I hope that this course will soon be offered to more than just a select few 9th graders. There are MANY students who could benefit from a solid foundation in Algebra!!!

Please continue to send examples and samples of expectations.

Please do not allow choice for districts to offer discrete or integrated math. School systems deal with many transient students. How will they adapt from a system that offers discrete to a system that offers integrated or vice versa? We dealt with this challenge at my HS where I worked with students coming in from FL. It is a nightmare!!

Please ensure that this class size will be limited. The teacher or teachers who teach this class will need to have background on teaching basic concepts.

Please include this course

Please just put it back to the "old" math ways.

PLEASE let us teach using the Discrete Model.

Please return to traditional math WITH a traditional math assessment so that we can purchase books for our kids!!!!

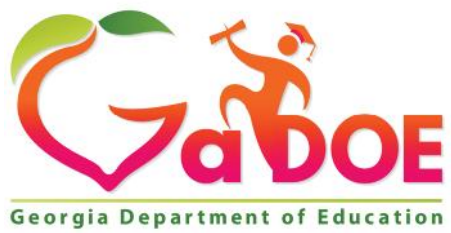
Please set the requirements based on failure of middle school math, failing only one middle school math can create a deficit large enough to merit enrollment in this class. Do not make the requirement too restrictive. If a student has to fail more math classes than

that then we are not creating a course that is needed, and someone has their head in the sand.

Problems we are facing now is not "curriculum," or "standards." Teachers are...

Radicals should be included so that when solving they Pythagorean theorem students can be give more challenging questions

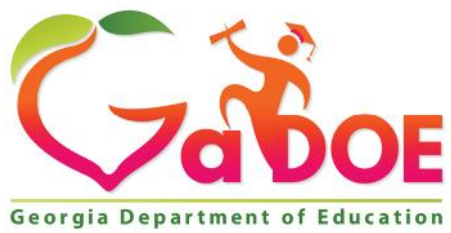
Resembles what I taught as a Pre-Algebra course. We have students that can definitely benefit from this course.



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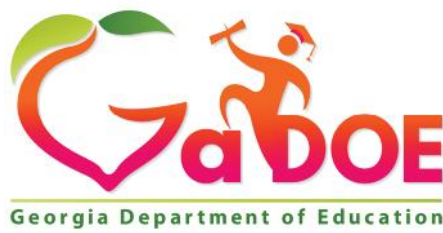
<p>School systems need to go back to traditional math classes such as algebra in 9th gr, geometry in 10th grade, algebra 2 in 11th grade...NOT Math 1, 2, 3 where these areas are combined and TOO advanced and not developmentally appropriate...at this time, my middle school child, 6th gr is doing algebra!!!!!! He is doing skills I did in 10th grade math...this is NOT satisfactory because he feels like a failure and we can't help him with math homework...we need ALL standards appropriate in K-5 to begin with!!!! There is no foundation for fluency or mastery. My child is an above average student, but now he doesn't care for math because he is being taught skills his brain isn't developed for....</p>
<p>Should be mandatory for those recommended.</p>
<p>Should have never went away from offering a third option like this. We're coming full circle now.</p>
<p>Standards MFAQR1 and MFAQR2 discuss characteristics and graphs of functions and some non-linear. Which non-linear functions? Quadratic, exponential, absolute value, piecewise....?</p>
<p>Standards seem much clearer and easier to implement than the current Common Core-aligned standards. Nice to have an option for the weaker math students.</p>
<p>Students have studied these standards since sixth grade (or earlier) and should have them mastered by ninth grade. This course should not be offered for credit, only to prepare students for the high school credit algebra class.</p>
<p>Take us back to just Algebra I, Algebra II, Algebra III, Trig, Calculus, and Statistics. The material is not being reinforced for the students to understand it. It is being taught and then forgotten. The old curriculum reinforced it in all courses just on different levels of difficulty. Please stop trying to mix all this together in a hodgepodge and confusing them more.</p>
<p>THANK YOU for finally creating a pre-algebra class for high school. This has been missing for the past six years since the switch from QCC to Math 1 etc. We will have many students who now have the opportunity to be successful in math by having one more year of algebra skills before beginning Algebra I.</p>
<p>Thank you for recognizing that not all students learn at the same rate. Many students enter high school and are not prepared to begin the rigor of Algebra. This course will help bridge the gap and pave the way for greater student achievement. This is something that we have needed for a long time!!</p>
<p>Thank you, thank you, thank you for developing this course!! Our high school students DESPERATELY NEED this. We have been trying to go through the motions of teaching Coordinate Algebra's abstract and rigorous concepts to a large subgroup of students who are severely lacking in background skills; it has been an exercise in futility for everyone. We have lived out the statements on the last page of the standards explaining the pitfalls of a lack of understanding; this experience also causes students to further dislike mathematics and to become cynical about the value of a high school education in general. The addition of a course like this would go a long way toward making high school graduation within the realm of possibility for some students who advanced to high school despite being "left behind" in terms of conceptual understanding of and procedural fluency with key ideas from elementary and middle school. Please do not let the Foundations Course be sidelined by any disagreements about the potential restacking of the algebra and geometry standards. Regardless of what changes or stays the same with the other high school courses, many of our students NEED this foundations course. Overall, I</p>



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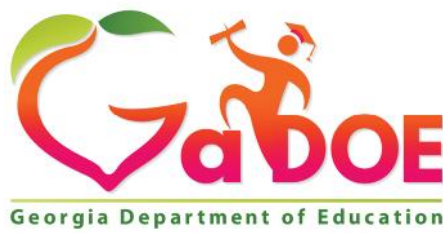
<p>agree with the choice of the standards included. I would like to see operations with signed numbers also addressed. I would like some clarity on the depth/breadth of the function analysis (symmetry, max/min, etc.) as this could be interpreted at many different levels. Also, careful thought should be given to the criteria by which students are assigned to the Foundations Course. Please look at research, real data from 9th grade math courses over the past few years, &amp; especially input from teachers who have been on the front lines of trying to help struggling 9th grade students.</p>
<p>Thank you! Too many students are entering high school that are totally lacking in a basic understanding of mathematical concepts. This course would help them get off to a much better start.</p>
<p>The course in general is an excellent idea. I think there is a great need for this type of instruction.</p>
<p>The integrated math program is a disaster. Return to the basics that have worked for centuries.</p>
<p>There are many students who are in need of this course.</p>
<p>These appear to be a step backwards in preparing students for college and career. This is essentially dropping the math requirement to 3 years of HS math. If that is the intention, why not drop the requirement to 3 years of math. If that is not the goal, why would we offer credit for a MS level course?</p>
<p>These are great! Question: Where will complex numbers be taught? I see that we will teach solving quadratics by completing the square, taking square roots, factoring and the quadratic formula but what happens when you get a complex solution? Are we only looking at quadratics with solutions and then addressing complex/imaginary solutions in advanced algebra? I did not see this in the advanced algebra standards.</p>
<p>These courses should be used for students that are being placed in high school.</p>
<p>This class is needed for our remedial population of students who struggle to be successful with the current curriculum.</p>
<p>This course could be very beneficial to students regardless of whether standards are realigned or not.</p>
<p>This course is a great addition! We have a group of students who may still struggle to pass Advanced Algebra, but could benefit more from the Mathematics of Finance.</p>
<p>This course is definitely needed to ensure success of our students in mathematics.</p>
<p>This course is exactly what some students need. There are students that struggle with basic foundations of Algebra - these are the students that will struggle to complete high school - especially Pre-Calculus. We need this course to help prepare this group of students for the work force and there is nothing wrong with that concept!</p>
<p>This course is necessary but needs to be taught as a co-teaching unit. I envision a high school teacher and a middle school special education teacher creating an atmosphere needed for learning to take place.</p>
<p>This course is not appropriate for high school and should not be included as a core math option.</p>



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<p>This course is only useful if those with gaps in their algebra knowledge are allowed to take it. As it stands, a student must fail the CRCT for 3 years in a row to enroll. Students with algebra deficiencies might fail portions of the test but still need this course to be successful at the next level. With such strict criteria for enrollment, you are tying the hands of educators and making this course useless.</p>
<p>This course is too remedial to be considered a core course. It should serve as a support course.</p>
<p>This course should help students by providing the prerequisite knowledge and skill for success the subsequent courses upon successful completion of the course. What options will be available if the students are not successful?</p>
<p>This course steps back 30 years and will ensure that students can graduate from Georgia High Schools. But they will not be able to compete with the weakest graduates from any country in the world.</p>
<p>This course will be a great opportunity for SpEd student who struggle with math to get a stronger skill base.</p>
<p>This course will provide the students who are often overlooked in mathematics an opportunity to "catch up" perhaps. It could also be used as a summer course for 8th graders who struggled or failed mathematics.</p>
<p>This course would be useful for those students who really struggle with math and need extra time to understand the material. The support model has not been as effective as it could be. Not all students are going to college, and the inclusion of the Foundations of Algebra course shows that this fact is being acknowledged.</p>
<p>This is a course that has been needed in mathematics ever since we changed to the Math I curriculum. I have taught 9th grade math since Math I started. We have several students who can never get out of the first level because there prereq. skills are so weak.</p>
<p>This is a realistic course to address the deficits students have arriving in high school mathematics pathways.</p>
<p>This is an essential tool that will greatly enhance our students' achievement.</p>
<p>This is exactly what are students who struggle with mathematics need to be successful. This gives them the chance to master the standards before moving in to higher-level math classes. Kudos to GADOE!!!!</p>
<p>This is good for pre-algebra.</p>
<p>This is long overdue. Kudos to the team who made this possible. I truly believe this change will have a positive impact on student outcomes.</p>
<p>This is needed! Most of my 9th graders are not ready for Algebra.</p>
<p>This needs to be co taught to utilize sped skills</p>
<p>This option will give the chance to many students that are weak in math background to succeed in high school and provide them with future opportunities to their level.</p>
<p>This would have been really helpful to have as an option for my daughter who struggled in middle school and has failed the first semester of 9th grade integrated concepts. There needs to be a focus on ensuring that kids understand the basics before moving on to more complex topics.</p>
<p>Very basic standards. Seems to me these are more designed for 8th graders or struggling high school students, in which case, I feel these students would be non-college bound students.</p>

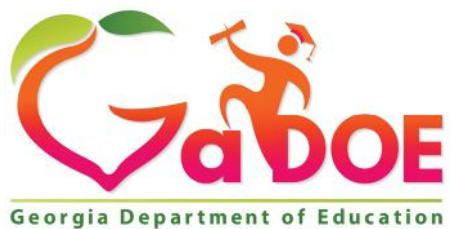



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Very excited about this course and its intent. Would like to see similar standards for a course for students already struggling leaving elementary school to get caught up during middle school, before reaching 9th grade.
We desperately need a class for students who are not prepared for Algebra 1. Students should be required to take this class based on their CRCT 8th grade math scores.
We desperately need a course like this for students who are not ready for 9th grade math.
We have many low level math students who enter high school needing this course. This course definitely needs to count as a core credit for these kids and not be overly restricted.
We need to make sure we have a co-teacher in the class this class to have more teacher student interaction. We also should have a lower level teacher such as a middle school teacher to help teach this course. Middle school teachers come with more ways to teach lessons than high school math teachers.
Welcome back to math students can use in the workforce
Will high school teachers be equipped with appropriate strategies in teaching these students concretely and bridging to abstract thinking? One concern is the learning and retention of certain skills. If a 9th grade student has not learned certain elementary level standards in the past five years, why would they learn those skills in this course?... some being one of 27 standards that are addressed taught. If these standards are identified at each grade level as high need for 9th grade, then why doesn't the state go back to those grade level standards and stress importance (beef up) those skills making sure they are revisited throughout all grades leading up to 9th.
Will students receive high school credit for Foundations of Algebra? Does the standards of this course reflect what is being taught in middle school now? Will the middle school standards change?
Will this be a complete math credit for those who struggle in math? Why is this called pre-algebra?
Will this count as a math credit for the students who struggle in Math?

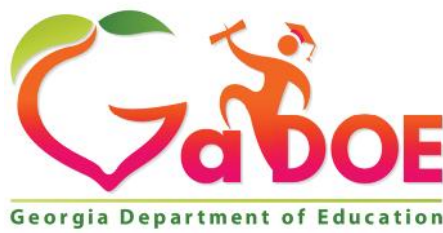


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with respect to the Foundations of Algebra Standards: As I understand it, this course is being offered exclusively to freshmen who struggle with math. For whatever reason, it is not their strong suit. In my (very humble opinion), everything I do in my classroom should pass my Goals Test: 1. Preparing students for the use of math in their everyday life as adults 2. Preparing students for the next class MFAPR2. Students will recognize and represent proportional relationships between quantities. It is an AWESOME standard! I am thrilled to see it listed, as the benefits to mastering this standard are endless. Kids need to learn percents. They will use them in daily life as adults. They will have to figure out sales tax, income tax, sale prices...the list is endless. Moreover, learning about percents will help set the stage for the exponential standards that they will learn in the Algebra course. This one topic works for both of goals. On the other hand, I see: MFANSQ3. Students will recognize that there are numbers that are not rational, and approximate them with rational numbers. I very much understand the need for deep conceptual understanding. I have taught this standard (or one like it) many times in the 14 years I have been teaching. But even though I have done it before, I must ask myself: How does this prepare kids for adult life? Will this help them be successful in the next class? Well, yes and no. Having a deep concept of the structure of numbers will always help students. But to what degree? This leads me to Materials: From what I have been reading, the state is planning on providing a lot of the materials for this course. The idea of having materials (both for students and teachers), in forms of examples for teachers to teach, problems for the students to solve, applications and tasks provided...it is phenomenal. A task is not enough; the kids need practice. Mindless repetition is not enough; the kids need applications. We need both. And while I have written most of my own materials for years, and am sure I will continue writing and creating for my classroom, this is yet another new class for which I have few resources. The learning curve for teachers to achieve a deep mastery of a set of new standards is always high. We can use all the help we can get! Having solid, balanced materials would also solve the question of emphasis that I raised earlier. The amount of examples, work, time, and applications devoted to a standard would very much help me guide my students toward success. For example, on page 106 of the 2013 Coordinate Algebra EOCT study guide, there are questions on even and odd functions. I find question 2 to be rather difficult. To me, a student would have to understand function notation, and that the function given is a horizontal line, and that would mean it is symmetric with respect to the y-axis, which would mean it is even, and then still understand the more formal function notation of even and odd functions. I saw this question as it relates to IF.4. However, when speaking with a co-worker, she thought it came from BF.3! Taking the guess work out of new standards through solid, balanced materials would help teachers collaborate, would help alleviate the time involved in writing new materials and would put us back where we belong...teaching! Ultimately, that is the best service we can provide to the students. I am very excited to see a scaffolded set of standards being implemented to help our students achieve success! MFAEI3. Students will create algebraic models in two variables b.



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Represent solutions to systems of equations and inequalities graphically or by using a table of values. (MCC6.EE.5, MCC7.EE3; MCC9-12.A.CED.2) I would very much like to see this standard changed to graphing two variable inequalities on a coordinate plane (not systems of inequalities). This could then be extended into context with applications (passes a goal test- required for success in Algebra). MFAQR2. Students will compare and graph functions e. Analyze graphs of functions for key features (intercepts, intervals of increase/decrease, maximums/minimums, symmetries, and end behavior) based on context. (MCC9-12.F.IF.4, 7) I very much like that this is added IN CONTEXT. Again, the students struggle with seeing this in an abstract manner in Algebra, and will benefit greatly from seeing it in context the year prior (passes a goal test- required for success in Algebra). I do however wonder how symmetry would be applied within context? MFANSQ2. Students will conceptualize positive and negative numbers (including decimals and fractions). FABULOUS! Meets BOTH of my "goal test" requirements! Other ideas: More emphasis on linear equations. Writing the equation of a line (given a graph, given the slope and a point). Putting lines into slope-intercept form and then graphing (multi-step). I think this is a middle school standard, but it is one that the students tend to struggle with greatly. And, it easily passes one of my "goal tests", as it is required for success in the Algebra class. Again, I thank you for all of your hard work and effort. I am confident that this new curriculum will help fill the needs of many of our students.

Would like to see a math pathway that prepares students for math skills that they will use in real life instead of pushing all students toward the same track and covering the same standards.

Would like to see less cross over between algebra and geometry in courses. Let the course focus solely on algebra or geometry.

You should definitely have middle school or upper school elementary students co teaching or even teaching the Foundations of Algebra course, I am certified in both but it wouldn't be fair to high school teachers who are not trained and current with scaffolding and or interventions for remedial students.