





# What is the Algebra for All Program?

The global economy requires students to have strong analytical skills to compete in college and beyond. Improving math skills and outcomes for all of our students is at the heart of this work. Research has established that students who successfully pass Algebra by no later than 9<sup>th</sup> grade are more likely to graduate from high school, go on to college, and graduate from college. To improve outcomes for all students The *Algebra for All* initiative will focus on three key goals:

- 1. Work with elementary and middle schools to improve student readiness for Algebra and high school math instruction
- 2. Support teachers to be successful in teaching pre-algebra coursework and Algebra, and
- 3. Engage students and families to strengthen their capabilities and mindset to be successful

# How will the Algebra for All (A4A) Initiative support teachers?

In order to insure all students are college and career ready, the A4A Program will provide teachers of grades 5 - Algebra I with the opportunity to deepen their understanding of mathematics at their grade level. This initiative will focus particularly on the content that is critical to student success in their grade and essential for later work in Algebra I, and will also expand their repertoire of strong instructional practices. This initiative will work with teachers to minimize any math anxiety they may have and strengthen their capacity to serve as content experts in their schools.

# 5<sup>th</sup> Grade Program:

The Departmentalization of 5<sup>th</sup> Grade instruction for our elementary schools is one of the initial strategies of *Algebra for All.* Research demonstrates that departmentalization will enable us to deepen the expertise of teachers while improving outcomes for students. We know this initiative is a big step forward and are working to develop both the operational and instructional supports schools will need to be successful.

### **Professional Learning Calendar:**

- In Year One, full-day sessions in the following months:
  - Three full days over February Recess (2/16-2/18)- Launch
  - Three weeks during Summer 2016 (Monday Thursday; 7/18-8/5/16)
  - Five days during the 2016 2017 school year (TBD)
- All sessions will be designed by the Office of Curriculum, Instruction and Professional Learning, Math Department in collaboration with national experts in mathematics instruction, multiple university partners and external partner organizations.
- Central Math staff will collaborate with Borough Instructional Leads from each BFSC to co-facilitate sessions with each cohort of 25 teachers from their respective BFSC-supported schools.

Please note, all teachers who participate in any professional learning for this program during vacation and/or summer will be paid at the per session rate.

# **Requirements for Schools:**

- Agree to schedule designated 5<sup>th</sup> grade teacher/s to serve as a *departmentalized* Grade 5 math teacher during the 2016-17 school year.
- If possible, provide scheduling for students for at least one hour of math instruction per day to increase the time students engage with mathematics each week.
- Commit to actively participating for the full term of the *Algebra for All* initiative including attending leadership sessions. Dates TBD.
- Commit to engage with families to share information about the program.

# **Eligibility Requirements for Teachers:**

Upper elementary school teachers who meet the following requirements are eligible for the 2015-16 *Algebra for All* program:

- Currently teaching Grade 5 or an upper elementary grade.
- Commit to attend all PD sessions as outlined above (finalized dates TBD).
- Plan to teach Grade 5 in the departmentalized structure during the 2016-17 school year.
- Demonstrated willingness to improve practice.
- Stimulated by the challenge to teach math to all students, including to struggling students, students with disabilities and ELLs.
- Has the recommendation and support from his/her Principal.