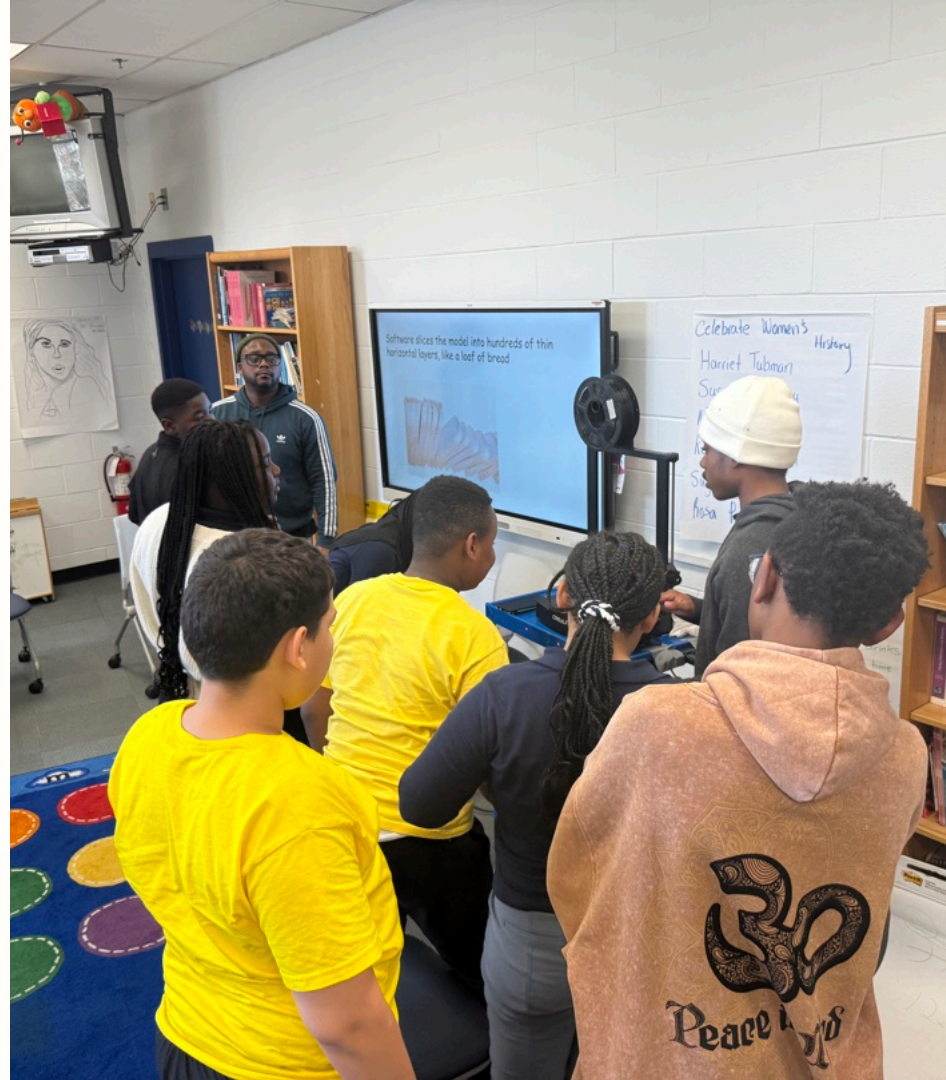


Looking Back: Double Up Math Club

Winter and Spring 2026 at Belmont-Runyon School, Mondays and Wednesdays.

PROGRAM REVIEW



What We Set Out to Do

Foster a love for math and resilience for problem solving through small groups, hands-on activities, visual learning, and games, while giving students exposure to algebra and other advanced math concepts.



~10

students per session, ranging 5 to 15

4–5

core students at nearly every lesson

2×

weekly sessions, two hours each

Who Joined Us

A core group of 4 to 5 students came to nearly every lesson, another 4 came every other session, and about 5 more joined from time to time. One 6th grader joined on a teacher's strong recommendation.

Members of the cheerleading squad and basketball team sat in when their schedules allowed, and we learned to stay flexible with students who could only make one of the two days, or every other week.



What We Focused On

Every session worked on three fronts at once.

1

PRE-TEACHING AND RE-TEACHING

We kept the pacing guide in mind and engaged students in upcoming or recently learned concepts.

2

SOLIDIFYING FOUNDATIONAL LAYERS

Number sense, multiplication and division facts, fractions, and operations, especially the ones most relevant to current lessons.

3

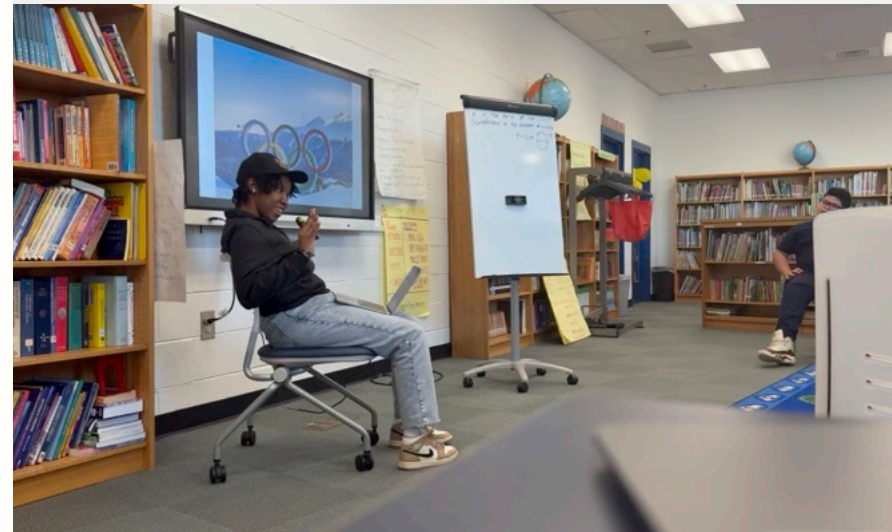
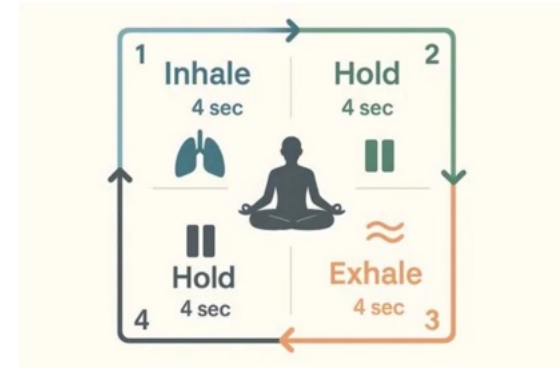
CHALLENGE EXPOSURE

Algebra and AMC 8 type problems, building critical thinking skills and tolerance for hard problems.

Social-Emotional Learning

- An SEL professional led a 15-minute Zoom to start us off, which we simplified into five minutes of meditation and breathing at the start of each session.
- Healthy snacks were part of every session.
- Students built public speaking confidence, two at a time, one minute each.
- We encouraged students to approach hard problems without stress and to look out for one another, so the room felt safe to be wrong in.

Box breathing



Math Fundamentals and Advanced Concepts

- A teacher-built times-table trainer let students drill exactly the multiplication and division facts they struggled with.
- Students tackled genuinely advanced material for their age: radical equations, and introductory glimpses into set theory and logic.
- The Flagway game, a simplified version adapted from the Algebra Project, turned factoring practice into a game.

Times Table Trainer
Multiplication & division -- and what you struggle with.

STUDENT INFO
Student name:
Thursday, September 17, 2020

STEP 1 -- GIVE LENGTH & TILES
Questions: Regular 10 --
Time: No limit --

STEP 2 -- WHAT TO PRACTICE
X Mult + Div Both

STEP 3 -- WHICH TABLE?

1	2	3	4
5	6	7	8
9	10	11	12

STEP 4 -- MULTIPLIER RANGE

42

Odd factors Even factors Repeated factors

Big men = { player | player taller than 7 feet }

- The big men set are players who are taller than 7 feet
- $B = \{ \text{players} \mid \text{player's height} > 7 \text{ feet} \}$
- $B = \{ p \mid p > 7 \}$

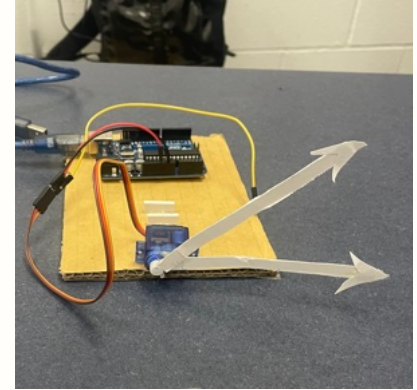
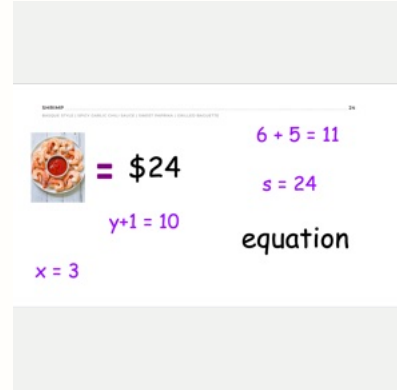


IF-THEN

- Symbol: $p \rightarrow q$
- IF it is nice out THEN we will go outside.
- Nice out $\rightarrow$ go outside.
- IF Jalen Brunson plays well THEN the Knicks win.
- Jalen Brunson plays well $\rightarrow$ Knicks win
- JB $\rightarrow$ K

Hands-On and Real-World Learning

- "What's Your Budget": students read a real restaurant menu as mathematical identities, then used Excel to calculate totals, including tax.
- "What's Your Angle": students coded a robot motor to open and close at different angles.
- 3D printing turned volume calculations into objects students could hold.
- Students measured triangles outdoors to verify the Pythagorean theorem for themselves.
- A basketball shooting activity had students track their makes and misses as percentages, connecting the result back to a prediction they had made from a smaller sample.



Connecting Math to the World

Lessons tied in current events such as the Olympics, geopolitics, March Madness, and the NBA Finals, showing students that math shows up everywhere, not just in a textbook.

We also presented our work to the Rutgers Math Equity Group at the Cornwall Center, sharing what Double Up has built with a wider audience focused on equity in math education.



RUTGERS-NEWARK
Joseph C. Cornwall Center
for Metropolitan Studies



RUTGERS-NEWARK
School of Arts and Sciences
Department of Urban Education

**New Jersey Mathematics Equity Webinar Series Spring 2026*

"One Love, High Five, & Ten Toes Down"

Youth-Centered Math Empowerment in Action

GUEST SPEAKERS



Emmanuel Larose
After attending the University of South Carolina and earning an MBA in Project Management, Emmanuel returned to his hometown Newark, NJ, to work at a startup and also make a difference in his community. He now works with youth, teaching software engineering skills and empowering the next generation.

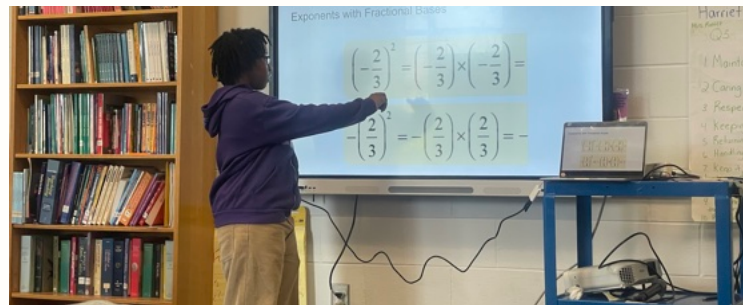


Elliot Ikkeloa
Elliot studied economics at Harvard and subsequently worked at McKinsey as a management consultant. He then worked as chief of staff at a Bronx high school before joining the founding team in a successful Bay Area tech company. After returning home, he founded a non-profit with his best friend focused on empowering local students through STEM education and teacher training.

Practice and Lessons

Every session opens with a presentation and an open discussion of one math concept, followed by related practice problems and one-on-one tutoring.

Students meet algebra concepts early, with time to understand them and build intuition before the material counts for a grade.



2ⁿ
Double Up Math Club

Name _____ Date ____/____/____

Simplify the following square roots.

33) $\sqrt{9}$	35) $\sqrt{36}$	37) $\sqrt{36}$
40) $\sqrt{81}$	50) $\sqrt{50}$	43) $\sqrt{18}$
70) $\sqrt{98}$	80) $\sqrt{45}$	90) $\sqrt{72}$

Simplifying square roots.

2ⁿ
Double Up Math Club

Name _____ Date _____

1. Convert the equation below to y=mx+b form to find the slope and complete the T chart.

$8y = 42x$

X	Y
0	0

2. Plot the points of the line where $x \geq 0$ and where $y \geq 0$
 $y = 3x + 6$

Slope, T charts, and plotting a line.

2ⁿ
Double Up Math Club

Name _____ Date _____

Solve each of the following equations for the missing variable.

1) $\frac{1}{2} + x = 7$

2) $\frac{1}{2}x + \frac{1}{3} - \frac{1}{4} = 3$

3) $\frac{1}{2} + \frac{1}{4}x = 5$

4) $\frac{1}{2} + \frac{1}{4}x = 4$

Solving for a missing variable with fractions.

HOW STUDENTS GREW

Students visibly grew in confidence, from public speaking practice, to tackling advanced topics like radical equations, to sticking with multi-step problems.

The group culture shifted too: students went from focusing on themselves, and sometimes putting each other down, to supporting each other more gently, which made for a more nurturing learning environment.

Where to Now

This small first year showed real promise: strong core attendance, meaningful SEL integration, and hands-on activities that made even advanced math stick.

Continuing our work at Belmont-Runyon and adding a second site

Training youth and community teachers more thoroughly

Syncing up better with school staff

Running more personal diagnostics where possible

We have requested test score and grade data from the district as part of our research and data-sharing agreement, and we are also interested in other forms of understanding impact.

Thank You

The people who made room for it: the Newark Board of Education, particularly Amanda Grossi, Director of the Office of Mathematics, along with Principal Michael Dixon, Vice Principal Carlton Savage, and the staff of Belmont-Runyon School.

And the people who taught it: Program Directors Elliot Ikheloa and Emmanuel Larose, Youth Teachers Taryn Closeil-Gray, Brian Griffin Jr., and Ehinobhen Okhuakhua, Community Teacher Lucius Watkins, and our SEL partner Natalee Facey.

Thanks as well to Professors Charles Payne, Arthur Powell, and Vandeen Campbell at the Rutgers Newark Cornwall Center for Metropolitan Studies for their advice and support, and to Benjamin Moynihan, Jay Gillen, and the various people continuing the Algebra Project legacy of math literacy as a source of power and a civil right.

Contact us at team@primefactors.org



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primefactors.org



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