



# MOMENTUM

**COMPLETE COLLEGE** AMERICA

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*MATH*

*PATHWAYS*

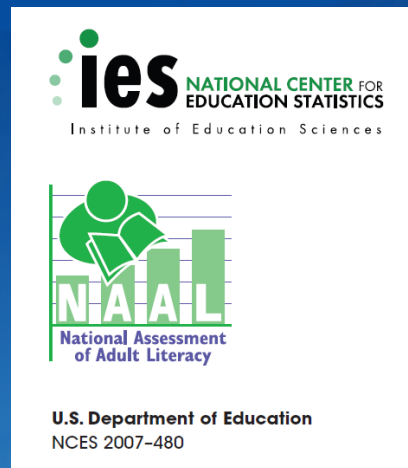
Eric Gaze

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# Why Quantitative Reasoning?

87% of U.S. adults cannot read or write...

...with Numbers. They are Quantitatively Illiterate.



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# Quantitative Reasoning (QR):

*Mathematics and Democracy* (2001)

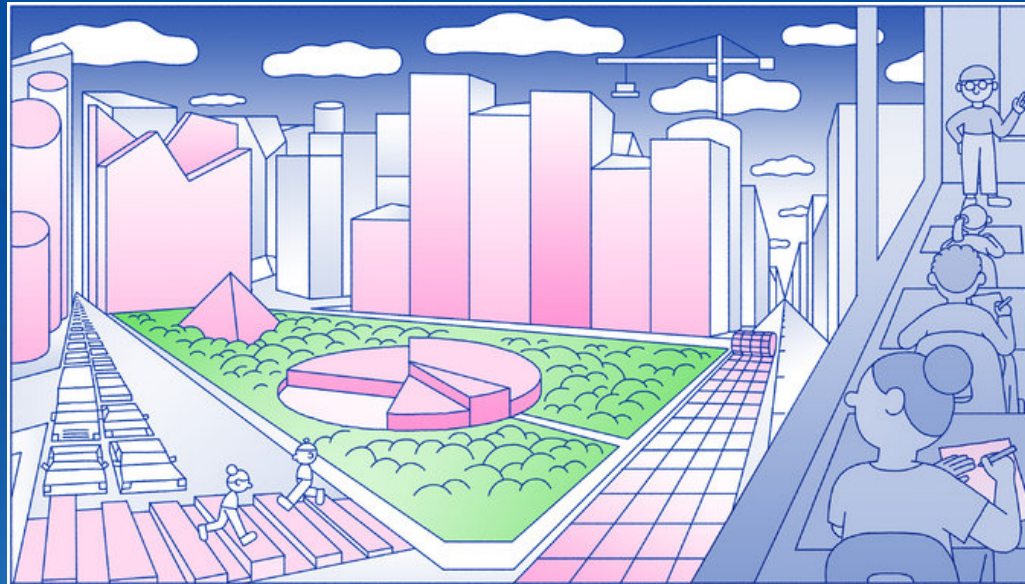
“Quantitative reasoning **empowers** people by giving them tools to think for themselves, to ask intelligent questions of experts, and to **confront authority confidently.**”

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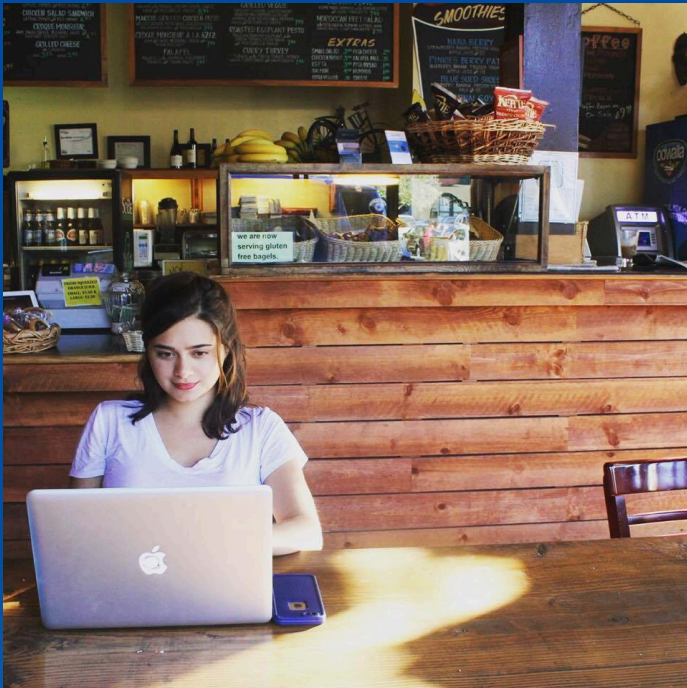
# Is College Algebra Necessary?

“What is needed is not textbook formulas but greater understanding of where various numbers come from and what they actually convey.”



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# Quantitative Reasoning (QR): A Program for Student Success



"I came to a drastic realization, I actually enjoyed doing math! Thank you. Last semester was the first time in my life that I looked forward to a math class, and applied what I learned outside of the classroom. Therefore, I REALLY want to take another math class like this."

-Fiona

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# Quantitative Reasoning (QR):

## A Program for Student Success

“Tonight at dinner my brother and relatives were discussing the time value of money. After hearing my businessy-brother compare fund quotes over different years I whipped out my CPI’s and apples to oranges argument and supported it with equations and QR logic snippets.”

-Fiona

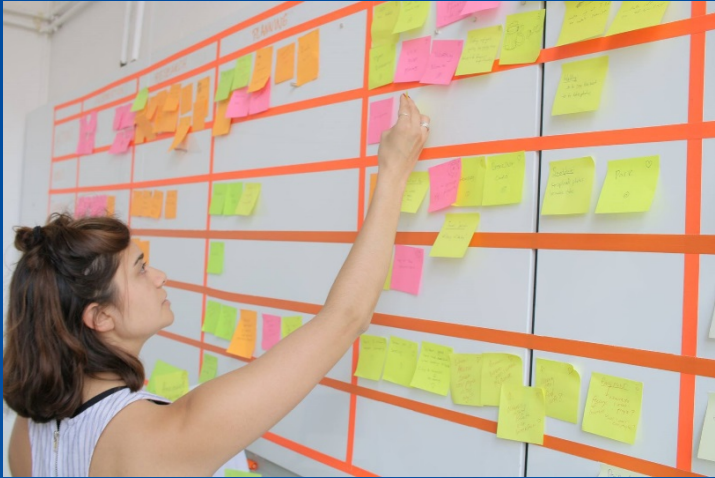


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# Quantitative Reasoning (QR):

## A Program for Student Success



"As the (very-labeled) humanities and arts child, it got me quite a few points. So THANK YOU, for enabling me to argue with my brother on his own playing field. That aside I learned a LOT this semester."

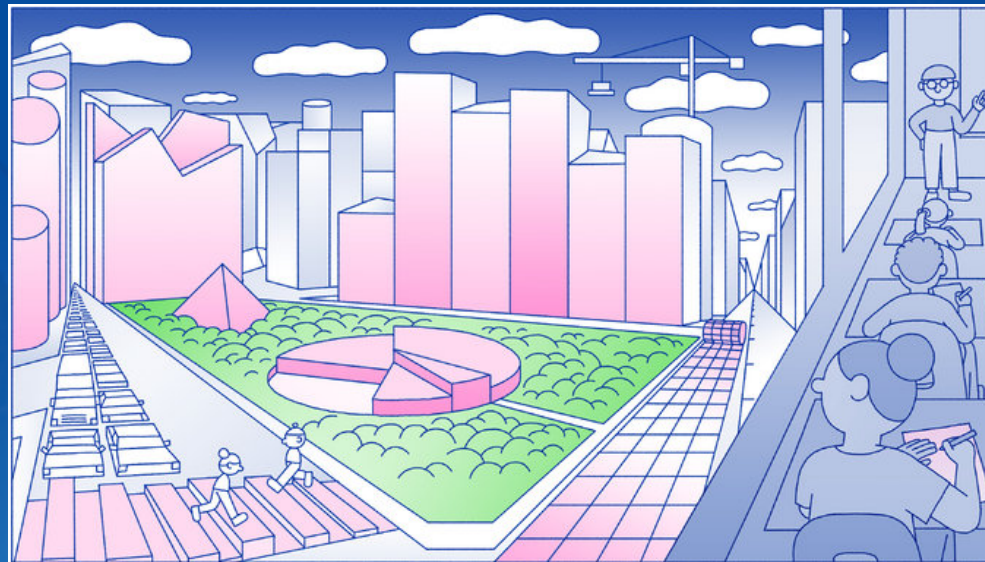
-Fiona

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# The Wrong Way to Teach Math

"Ours has become a quantitative century, and we must master its language.

Decimals and ratios are now as crucial as nouns and verbs."



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[illegible]

# The algorithmic CEO

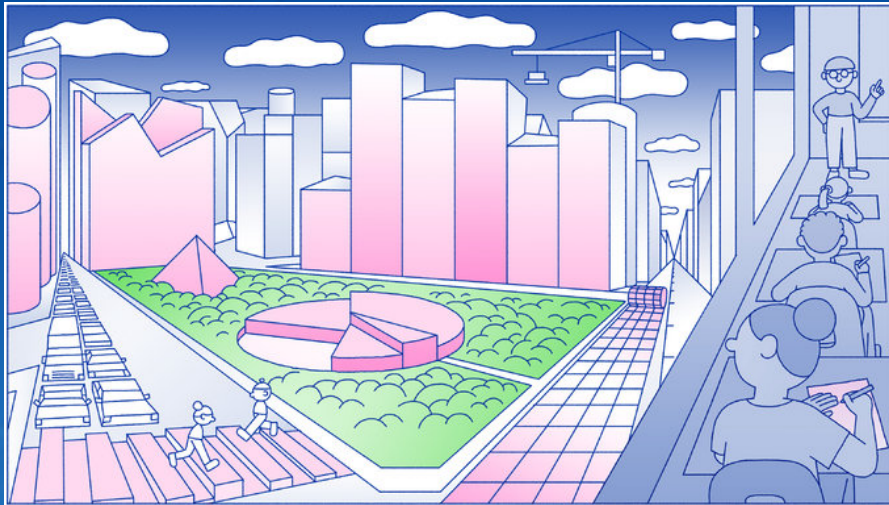
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# The Right Way to Teach Math

“For there is a much more recent implementation of al-Khwarizmi's method of algebra--one of immediate use to everyone in today's world: the electronic spreadsheet. A perfectly correct description of Microsoft Excel is that it is a computer implementation of algebra...”



- Keith Devlin February 29, 2016

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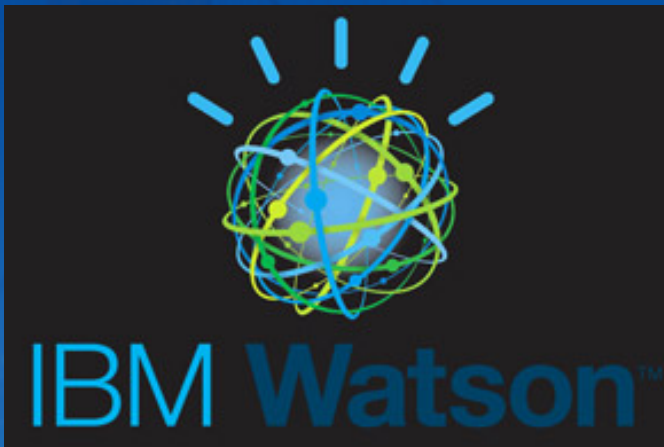


# Quantitative Reasoning (QR):

A Program for Student Success

"QR was one of the most useful courses I have taken at Bowdoin. I am interning at IBM this summer as a part of their Watson Sales Enablement team and constantly use spreadsheets and QR. Thank you for bringing in and teaching this course!"

-Daniel



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