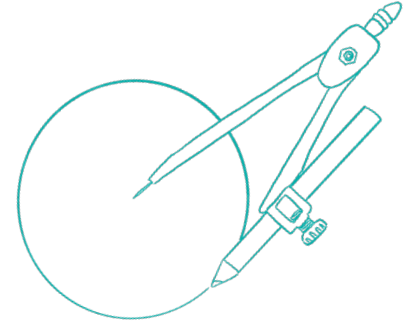




How to Talk to Students About the Relevance of Higher-level Math

It can be hard for 6th to 10th grade students to connect higher-level math, like algebra, to their everyday lives. Understanding why higher-level math matters is critical to students' willingness to engage and persist in learning math. It's important to offer concrete examples of how higher-level math is relevant because vague examples are not credible for students in addressing their doubts.

It is also important to recognize that students have different priorities and interests, so an example might work well for one student, but not as well for another. Using a diversity of examples is more effective than using just one.



Effective Examples	Less Effective Examples
Examples that students find credible include those that show how higher-level math can concretely benefit themselves and their families.	Abstract examples or those that are vague often feel less credible for students.
Higher-level math helps you become financially literate or make better financial decisions (e.g., you could talk to students about knowing if it's better to pay for a phone all at once or in installments and with fees)	Math is a universal language. Students often think of language as a way of communicating (e.g., Spanish, Japanese, French). Therefore, students often find this metaphor confusing because they don't see math in the same category as those other languages.
Higher-level math can help you understand how to manage and choose between loan options to buy a car, a house, or other big purchases as an adult.	Math helps you build critical thinking skills. Students don't believe that math is the only way to learn critical thinking skills – many believe they can also develop those skills learning other subjects which often feel easier and more connected to their own lives.
Higher-level math can help you protect yourself and your family by making you better able to recognize scams and companies that want to take advantage of you or your family (e.g., you could talk to your students about how math can help you spot predatory lenders and pay-day loans)	You just have to get through higher-level math so that you can graduate from high school or get into college (e.g., it may not be fair, but you just have to get through it). Examples that ignore students' agency or are too negative are often demotivating and can make students feel they are being acted upon.
Higher-level math can help you 'pivot' in your career. If, as an adult, you find yourself in a job you don't like, understanding higher-level math can give you more options about what to do next.	All careers use higher-level math, or you will need higher-level math in your life generally. Students have a diversity of life and career goals. Many students believe that this is either not the case or that the jobs/careers they aspire to will depend more on knowing how to use a tool (e.g., apps, technology platform) than how to do the underlying math.
For each category above, specific examples connecting to students' everyday lives resonate with students, such as: Is buying or renting a video game better? (for students who play video games).	