



Math Myths and Misconceptions

A Series on Preventing and
Repairing Student Misconceptions
in Mathematics



Math Myths and Misconceptions

Session 1

Misconceptions and Their Potential Impact on Future Learning



Math Myths and Misconceptions

While students take math every year, many struggle to master key mathematical skills and concepts—and to apply what they know to problem solving.



Math Myths and Misconceptions

These students appear unable to fill these gaps despite being re-taught numerous times.

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Math Myths and Misconceptions

Research shows that what may be holding these students back is not a lack of knowledge, but incorrect knowledge or correct knowledge misapplied.

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These gaps and misconceptions inevitably lead to poor performance in class, on state tests, and later to failure in algebra.

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Students end up hating math
and giving up in confusion.



Math Myths and Misconceptions

Let's look at some common myths and misconceptions students have and discuss the impact each might have on the understanding of mathematics.

Math Myths and Misconceptions

“You can’t take a bigger number from a smaller number.”

- What are some counter-examples to this misconception?
- Why might a student have this misconception?

Math Myths and Misconceptions

“You can’t take a bigger number from a smaller number.”

- How does this misconception impact future understandings?
- How might this concept be approached to lessen or eliminate the misconception?

Math Myths and Misconceptions

“When you multiply two numbers together, the answer is always bigger than both of the original numbers.”

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